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USDA

FOR JANUARY 5, 1948

World Agricultural Resources

O. E. BAKER, professor of geography at University of Maryland, recently published a stimulating article on this general subject in "Maryland," the university's alumni publication, edited by Reuben Brigham's son, David L. Dr. Baker estimates that it would be possible to increase the world's crop production at least 75 percent by putting to crop use all land that could and should be cultivated, and by such application of scientific knowledge to agricultural technology as would, increase acre yields 40 or 50 percent.

He remarks that, whereas Canada and the United States combined have about $3\frac{1}{2}$ acres of cropland per person, of which 3 are required for domestic consumption, the U. S. S. R. has 2 acres, Europe, excluding U. S. S. R., only about 1 acre, China a half-acre per person—which, however, often produces two crops annually—and Japan but a quarter-acre, which is farmed most intensively. The Orient adjusts by using little meat, few eggs, and practically no milk, on the well-known theory that it requires 3 or 4 times as much land to produce the same number of calories from animals as man would require using cereals directly.

Dr. Baker also reminds us that if we could live on sugar alone, a quarter-acre of sugarcane or sugar beets would suffice us each for calories, or two-thirds of an acre of corn or of potatoes. But when corn is transformed into pork and lard, fully 3 acres are needed to provide adequate calories per person, whereas $1\frac{1}{3}$ acres of wheat would do the job, if consumed directly.

Dr. Baker sees twice as many people in the Orient a century hence as today, a half billion more in U. S. S. R. and satellites, but far fewer in the remainder of Europe, and only 100 million in the U. S.

(The Editor of USDA has a few copies of this article if you want to write in for one.)

Television debut

USDA MADE its debut in big-time television with a Thanksgiving turkey show over the NBC television network at 9 p. m., November 23, 1947. Previously the Department did one TV (television) show from Washington with DuMont (BAE); one in New York with NBC (FS). During the war, the War Food Administration did a few programs both in Chicago and New York. But the November 23 show was the first on the network. It was carried by stations in Washington, Philadelphia, New York, Schenectady, and Boston.

The half-hour show included three major episodes, or scenes: (1) Ken Gapen of Radio Service, Dr. T. C. Byerly and Stanley Marsden of Bureau of Animal Industry examining and discussing a live Broad-breasted Bronze and Beltsville White turkey, (2) Dewey Termohlen of Production and Marketing Administration and Mrs. Byerly at a "meat counter" of dressed turkeys, talking about the whole, half, and quarter turkeys on the counter, and (3) a Thanksgiving dinner-table scene, with H. L. Shrader of Extension carving a turkey (as it should be carved) for his "family," composed of Mrs. Byerly, Ernie Moore, Jr., and Mary Termohlen, with Gapen looking on benignly. The show opened with a snatch of an old USDA film on turkeys, including turkey flocks and a Pilgrim hunting wild turkey, and closed with another bit of a turkey film.

Those who saw this and other TV productions—including a poultry dealer who wrote in approvingly—feel that TV is ushering in a new era in agricultural information and educational work. It will enable us to tell stories that we couldn't tell effectively by the straight "ear" method. But Ken Gapen thinks a lot of study and experimentation are needed to adapt agricultural and home-making information to this new medium.

Superior accomplishments

The following employees have been awarded pay increases for superior accomplishment:

Farmers Home Administration: MILDRED E. PEITZ, clerk-typist, for establishing a commendable record in the performance of her duties by utilizing her knowledge of all phases of the FHA program to work in an accurate, courteous, and cooperative manner which was consistently better than the work performance of other employees who were determined to be outstanding. BURLIN B. MARSHALL, tabulating equipment operations supervisor, for devising and installing a machine method of checking county totals of the trial balances of loan accounts and of maturity report work cards with related county figures. This method has resulted in a saving of many man-hours formerly used in manual checking.

Forest Service: ROBERT E. PORTER, laboratory aid, for suggesting the redesign of a laboratory apparatus, the adoption of which was responsible for accelerated completion of tests to evaluate the effects of exposure on housing materials. During the past year Mr. Porter's outstanding performance in connection with two of the more difficult specialized tests and his inherent interest and initiative in his work, as exhibited by the above, are of a type not expected or required of a laboratory aid. PABLO LUCERO, janitor, in recognition of his outstanding devotion to duty. Mr. Lucero has proved an unusual ability to make major repairs on all types of mechanical and automotive equipment. In addition, he learned to do arc welding, to operate movie projectors and public-address equipment, all on his own time and initiative, in order to perform greater service to the station.

Library: DORIS L. BAILEY, clerk-typist, in recognition of her excellent work in compiling a manual of procedures for interlibrary loan work, handled at her desk. This compilation included existing procedures and the writing of procedures under which she was operating, which were not available previously in written form. The preparation of the manual, on her own initiative and mostly on her own time, showed interest in the job and ingenuity far in excess of what is required of a clerk-typist.

Plant Industry, Soils, and Agricultural Engineering: WILLIAM H. CHEESMAN and ALICE I. FRAY, see USDA, September 1, 1947, page 4, column 1.

Production and Marketing Administration: JOHN W. PIERCEY, administrative assistant, for services distinctly beyond the requirements of his position, while serving as co-chairman and coordinator of the Famine Emergency Program, in Detroit, during March to July 1946. Mr. Piercey organized the city of Detroit in a thorough and concentrated drive for food conservation, planned and organized promotional aspects of the campaign, and in addition, appeared as a speaker on several radio broadcasts and city-wide meetings. JESSIE E. MASON, fiscal accounting clerk, devised a procedure for the issuance of United States savings bonds which resulted in the saving of 65 man-hours each biweekly pay period, an approximate yearly saving of \$1,750. In addition, Mrs. Mason's suggestion simplified work so that the volume of bond issuances may be kept current, resulting in better service to employees enrolled in the savings plan.

Soil Conservation Service: W. DON PETERSON, agricultural engineer, for devising a set of steel forms to mold concrete structures used in the installation of permanent irrigation turn-outs. Eyes placed in the steel plates provide for insertion of steel pins to assemble the plates into forms of various sizes and shapes. The use of these ingenious concrete forms has resulted in savings in

time and material and has accelerated the irrigation program. WATSON A. LUPHER, soil conservationist, for developing cooperative methods and functional procedures outside the regular scope of his duties. While serving as work unit conservationist furnishing technical assistance to the Jefferson County Soil Conservation District Mr. Luper assisted in a district membership plan which enabled the work to go ahead twice as fast as in other districts. He inaugurated a complete system for handling of maps and map orders which provided for cataloging all farms in the county and transferring information to the maps so that duplicate maps may be made within a few minutes. He initiated a system of using aids to help keep in contact with the farmers applying for work in the district and also operated in a plan to develop community leaders as aids. As a result of Mr. Luper's efforts, morale in his district was kept at an exceptionally high level.

Remember these descriptions of the accomplishments are greatly summarized because of space limitations; actually they are summaries of summaries.

Retirement

THE RECENT Honor Awards ceremony, at which tokens were presented to a number of USDA employees who have served 40 or more years, reminds us that, every year we have an ever-increasing number of potential retirees with 30, 35, and 40 years service. Furthermore, the trend is to make retirement laws more liberal and for our population to grow continuously older because life expectancy increases. But retirement is a serious question. Were you aware of this?

Increasingly the editor of *USDA* gets letters from retired USDA employees who are actively engaged in other jobs—not sitting loafing, but working, often in a wholly new occupation, and very happy in this activity. Not long since Dr. Clarence A. Neymann, professor of psychiatry at Northwestern's Medical School, warned those who plan, upon retiring, to renounce all activities and achieve what they regard as the bliss of inactivity. Said he: "Life has a quick way of disposing of nonworkers and nontailors."

It is not necessary to continue the activities in which you are engaged before retirement. Complete change may be beneficial, *but remain active*. Don't above all things crawl into yourself and live only for yourself in selfish smugness. Regardless of financial security, remain active at something that really enlists your full capabilities and puts you to test. Retirement should be the culmination of your career, perhaps the most active part of your existence.

Atom farm study

Three hundred scientists met in Auburn, Ala., December 18, to consider how atomic energy can help the American farmer; this national conference had a 3-day program.

Check your script?

MORE AND MORE magazine editors and free-lance writers are making use of the Department's facilities to have manuscripts checked for accuracy by subject-matter specialists in the USDA. Articles on the food situation have involved careful checking by the Office of Foreign Agricultural Relations, Bureau of Agricultural Economics, Production and Marketing Administration, Bureau of Human Nutrition and Home Economics, and Food and Agriculture Organization. Two recent stories in a national women's magazine, regarding health and the school lunch program, were checked by Extension Service and PMA. A piece on household insecticides, and a good one, was approved by Entomology and Plant Quarantine before publication in a national weekly. All scientific agencies and units of the Department are eager to help popular-science and general magazines keep their facts straight.

A story on apples, featured recently in a magazine for young women, was checked by the Bureau of Plant Industry, Soils, and Agricultural Engineering, HNHE, and BAE. This proved to be a pleasant chore, at least for the man in BAE who read the script. "The story was well written," he said, "the kind I like to see, with flash and snap and crackle and a lot of punch to it." Another manuscript, under consideration by the editor of a general magazine, was sent in with the comment that "There may be defects in it which would be obvious to experts but not to editors." There were!

Items in recent magazines of interest to *USDA* readers include the following: Forecast for Home Economists, November, features the Yearbook of Agriculture under "New Books We Like." American Fabrics, handsome quarterly of the textile trade, observes that the Southern Regional Research Laboratory was the first in this country to produce fibers from peanuts. This Week Magazine, November 30, has an accurate, well-written article by Dickson Hartwell, entitled "More Food for More People," telling how our scientists at Beltsville are helping farmers produce more and better food with less labor and at lower cost.

Women's preferences

New Miscellaneous Publication No. 641, entitled "Women's Preferences Among Selected Textile Products," prepared in the Bureau of Agricultural Economics, contains a wealth of valuable information on the subject that should prove widely useful.

SAVE FOR SAMMY?

Use the official mail and messenger service. If you work in the Department in Washington, D. C., or at the Agricultural Research Center you can use the Official Mail and Messenger Service operated by the Post Office Department for the transmission of mail and packages without charge. Mail addressed to anyone in the Department of Agriculture, or to Government agencies in Washington, can and should be transmitted in messenger envelopes. See Plant and Operations Circular No. 158, which gives the details, so why don't you save for "Sammy"?

Research manpower

TODAY NATIONAL expenditures for research and development, which increased 335 percent during World War II, are still three times as high as pre-war. But war curtailment in education during the same period deprives the Nation of about half its normal increase in scientists.

The scientific progress of this Nation depends upon about one-half of 1 percent of its population—750,000 persons. Within this pool a smaller group of 137,000 comprises the scientists and engineers actually engaged in research, technical development, or teaching, in colleges, universities, industry, and Government. A still smaller group of some 25,000 have doctor's degrees in physical, biological, or agricultural sciences.

In 1937 about 14,000 scientists were employed by Government, as compared with 35,000 in 1945. The respective figures for industry are 22,000 and 57,000; for colleges and universities the figure remained static around 35,000 to 36,000. The distribution of scientists with doctor's degrees followed the same pattern. The total effect of World War II, curtailment of educational opportunity and the drafting of students included, was to deprive the Nation of some 90,000 bachelors and some 5,000 doctors of science.

These figures will rise to 100,000 and 8,400, respectively, before the effects of war-reduced enrollments are overcome, but as only 90 percent of the doctors and about a third of the bachelors normally enter teaching or research, the net loss is estimated at 40,000, of whom 7,600 would have been doctors. Meanwhile, in 1947, Government was employing only 30,000 scientists, industry was unchanged at 57,000, and colleges and universities were up 14,000 to 50,000, from 1945 figures.

(These and many other facts on similar topics appear in Manpower for Research, volume four of Science and Public Policy, a Report to the President by his Scientific Research Board. Procure from libraries.)

Brief but important

Bovine tuberculosis

A paper on Diseases of the Chest (vol. xiii, No. 4, July-August 1947) by Dr. H. M. O'Rear, inspector in charge for Bureau of Animal Industry at Sacramento, Calif., again reminds us that the Bureau's campaign to eradicate bovine tuberculosis has had a most beneficial effect upon human health. Since the program began, in 1917, some 279.5 million tuberculin tests have been applied in more than 22 million well-scattered lots of animals, of which 3,892,000 revealed positive reactions and were condemned. Today, positive reactors are rare, incidence of bovine tuberculosis has been reduced to less than 0.5 percent, and human infection with bovine tuberculosis is consequently far more rare here than in countries which have not eradicated this animal disease. Read the article for details; write Dr. O'Rear for a reprint.

Speculators

Administrator J. M. Mehl of our Commodity Exchange Authority presented the facts on wheat future accounts to the Joint Congressional Committee on the Economic Report. Corbin Dorsey of CEA can supply you with a copy of Mr. Mehl's statement which contains many arresting facts about grain speculation. Incidentally, increasing speculative grain margins to 33 1/3 percent did lower the speculative fever considerably.

Atoms For the Millions

If you want to read an accurate popular book about atomic energy or force, the isotopes, and their potential peacetime uses, we can now recommend *Atoms for the Millions*, by Maxwell Leigh Eidinoff and Hyman Ruchlis, with introduction by Harold C. Urey, published by McGraw-Hill of New York City, and available from libraries and book stores. The book is about as non-technical and as free from mathematics as any such volume could be and yet remain accurate. It is also littered with fanciful illustrations by Maurice Sendak.

Collective farms

There is a well-rounded highly informative discussion of the Kolkhoz, the collective farms, of Soviet Russia, in *Foreign Agriculture* for November-December 1947. The author is Lazar Volin of Office of Foreign Agricultural Relations, USDA, where copies of the magazine may be procured.

We recommend

A reading of *Range State Research*, by Maurice R. Haag, editor of the Wyoming Agricultural Experiment Station, at Laramie, in September 15, 1947, *Chemurgic Digest*, published by National Farm Chemurgic Council, Columbus, Ohio. It gives a complete and readable illustrated digest of the work going on at the Wyoming Experiment Station. Also do not miss Dan M. Braum's (Personnel) "Progress in Scientific Farm Management," in the Proceedings of the International Management Congress. This is the paper he delivered in Sweden during the summer of 1947.

Cotton pests

Prominent USDA entomologists took part in the meeting of the National Cotton Council of America, December 8, at Columbia, S. C. For what is being, or could be done to make life difficult for the pink bollworm, the boll weevil, the red spider, and various aphids, ask Press Service, USDA, in writing, for release 2791.

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PMA appointments

A. J. Loveland has been appointed Director of Production and Marketing Administration's Agricultural Conservation Programs Branch. He operates an Iowa farm, has long been, first an AAA committeeman and more recently, chairman of the Iowa State PMA Committee. This ACP Branch plans and directs the Agricultural Conservation Program, in accordance with the Agricultural Adjustment Act of 1938 . . . Col. F. W. ImMasche is a new Assistant Director of PMA's Livestock Branch; he has been in the United States Air Force but, before that, was in Farm Credit Administration—way back even in Farm Board days. He was born on a Kansas stock farm, graduated from Kansas State, and received his master's from University of Chicago.

Chestnut improvement

Press Release No. 2796 tells an interesting story about the exchange by air of pollen, scions and chestnuts, between Italian and United States scientists, in the effort to develop chestnut trees resistant to the Asiatic blight which killed most of our chestnuts and is now destroying Italian groves in both countries. G. F. Gravatt at Plant Industry Station, Beltsville, is the USDA specialist in charge of chestnut-disease work. Get the release by mail from Press Service, USDA.

Co-ops

Secretary Anderson went all out for co-ops in his talk at Everett, Wash., on December 11. For vital information about farm co-ops, interestingly and vividly presented, get this talk from Press Service, USDA, by mail, asking for No. 2765.

Rural Electrification News

As you will recall, the Rural Electrification News was formerly issued monthly. It is now issued bimonthly; price, 75 cents a year; foreign, \$1 a year; single copies, 15 cents. All subscriptions and single copy orders should be sent to the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.

Feed-yeast production

M. K. Veldhuis and W. O. Gordon, Bureau of Agricultural and Industrial Chemistry, have worked out a continuous process on pilot-plant scale for the production of feed yeast from citrus peel juice. Write Press Service for release 2811 to get details.

Tariff changes

Agricultural tariff changes, in connection with the UN announcement of the results of the recent Geneva reciprocal trade negotiations, are summarized in release 2646; write Press Service, USDA, for it.

Poultry fact sheets

Fact sheets on Culling Poultry To Conserve Grain and on Conserving Grain Supplies by Serving Poultry, may be procured from Information Branch, Production and Marketing Administration. Other fact sheets may follow; ask about them, too.

Medal for movie

The Chief of our Motion Picture Service, Chester A. Lindstrom, writes in: "An artistic medal has just been received from Festival Mondial du Film et des Beaux-Arts de Belgique, Brussels. It was given in appreciation of the picture, *The Crop That Never Fails*, produced by the Motion Picture Service for the Treasury and Agriculture Departments. Would you want to mention this in *USDA*? The answer is yes!

How to lose a secretary

Not that anybody wants to, but a poll of a thousand Albany business college students recently indicated that secretaries primarily do not like bosses who give them last-minute typing jobs at quitting time. To only a very slightly lesser degree did they dislike those who mumble or flurb their dictation, and those who never dictate without a cigar or cigarette in mouth to interfere with articulation and transmission. Aversions to shirkers who ask the secretary to do the wife's shopping and hypocritical wolves are also pronounced and very real in the minds of these Albany business students.

Second UNESCO Conference

The Second Annual UNESCO Conference was held in Mexico City during November. There were five United States delegates, three of them being Milton Eisenhower, president of Kansas State; Reuben Gustavson, chancellor of the University of Nebraska; and Helen White, professor of English at University of Wisconsin—a goodly portion of agricultural experts. The other two members were Hon. William Benton, chairman; and Lawrence Duggan, director of the International Institute of Education, New York City.

Farm Policy Forum

This new publication from the Iowa State College Press will be circulated at a nominal subscription price and will seek to evaluate agricultural programs, both operating and proposed. It will be a genuine forum, giving both sides their say, and will also print reviews of farm literature.

Thomsen's back

Our old friend, F. L. Thomsen (agricultural economist, B. S., Maryland, 1917; Ph. D., Wisconsin, 1925), has returned to USDA as Director of Production and Marketing Administration's Marketing Research Branch. He will be responsible for the review and coordination of all research projects assigned to PMA under the Research and Marketing Act of 1946, and will supervise those which cut across commodity lines. Dr. Thomsen joined Bureau of Agricultural Economics in 1936, having taught ag. ec. at University of Missouri from 1925 until then. He headed BAE's Division of Marketing and Transportation Research from 1942 until 1947.

Research Achievements

Research Achievement Sheets 85 (C) and 86 (C) deal with the work in the Eastern Regional Research Laboratory which resulted in the recovery of flavor essence and the production of bland sirup from sound cull apples. No. 87 (C) concerns the use of soft grits from ground corn cobs and rice hulls for cleaning machine parts, the work having been done at the Northern Regional Research Laboratory. These sheets can be procured from the Coordinator of Research Publication, Agricultural Research Administration, USDA, Washington 25, D. C.

Market News

Information Branch, Production and Marketing Administration, has issued a mimeographed document telling what the Market News is, listing Market News offices (and who's in charge), by cities, seasonal field offices, and location and chiefs of the Information's Branch's field offices. Procure it from the source indicated.

Foot-and-mouth disease

The changes recently made in the foot-and-mouth disease program in Mexico were discussed in press release 2709, and the new plans made to strengthen the defense line against the disease were detailed in release 2809. Write for these to Press Service, USDA.

Ambitious youth

Dorothy R. Arvidson, assistant in 4-H Club work in Indiana, and George S. Foster, assistant county agent, in charge of 4-H Club work in Washington County, Tenn., selected from candidates submitted by each State for the 4-H fellowship awards, are in Washington, D. C., engaged in an intensive training course. Sponsored by the National Committee on Boys' and Girls' Club Work in cooperation with the Cooperative Extension Service, the awards provide for 9 months' residence and study in the Department of Agriculture. This is the first time since 1941, when interrupted by the war, that 4-H fellowship awards have been offered. If they are fair samples Extension sure knows how to select intelligent, personable, and ambitious young people.

List of Federal laws

USDA Document No. 2, Abridged List of Federal Laws Applicable to Agriculture (Including Reference to Former Functions), has been brought up to date in the Office of the Solicitor, and the January 1, 1948, issue is available. This is a chronological list of only the most important laws relating to USDA's structure, functions, and activities. For copies write (please do not phone) T. Swann Harding, Office of Information, USDA, Washington 25, D. C. Use interoffice mail when possible.

Dilemma of modern man

The anonymous writer who recently stated that modern man had discovered the instruments of abundance and peace but could create only scarcity and chaos really had his finger on something.

China-Philippine reports

The Office of Foreign Agricultural Relations (USDA) says that printed copies of the reports containing recommendations which United States agricultural specialists helped to draft for the improvement of agriculture in China and the Philippines are now available for distribution to interested persons. Copies may be obtained personally, or by mail from OFAR's Publications Division, 5918 South Agricultural Building. The Chinese and Philippine reports were prepared after months of intensive surveys of immediate and urgent farm problems and studies of long-range agricultural programs in China and the Philippines by missions composed of leading agricultural technicians and sponsored by the United States Departments of State and Agriculture.

Speculation and income tax

Secretary Anderson made an interesting statement, December 3, on speculation and income tax avoidance, on a basis of a report entitled "Futures Trading and Income Tax," prepared by the Commodity Exchange Authority, USDA. You will find his statement in release No. 2754; write Press Service for it. The report itself covered a survey of 13,551 commodity futures accounts outstanding on August 30, and contains the results of a special investigation of the practice of keeping offsetting trades open in the same future after financial results are definitely established.

RMA project

Two projects, one seeking to demonstrate the practicability and type of equipment needed to produce animal feeds from vegetable wastes on a commercial scale, and the other to evaluate commercial-scale processes for drying potatoes for feed and other non-food uses, were approved recently under the Research and Marketing Act. The projects will proceed under supervision of the Eastern Regional Research Laboratory. Write Press Service, USDA, for release 2736 to get details.

Kefir fermented milks

Information, Bureau of Dairy Industry, USDA, can supply a processed leaflet giving Directions for Making Kefir Fermented Milk, by L. A. Burkey of BDI. These are acid milks prepared from kefir grains, convoluted gelatinous particles obtained from similar milks often prepared in southwestern Asiatic countries.

Edgar S. McFadden

McFadden, now USDA agronomist at College Station, Tex., last mentioned herein in the December 8 issue in connection with Seabreeze wheat, was honored October 16 last year, at Webster, S. Dak., with a McFadden Appreciation Day, when a granite memorial to him was unveiled for his accomplishments in wheat breeding and his production of a parent wheat stock now used by plant breeders the world over. McFadden made the cross between emmer and Marquis in 1916, while a student at the University of South Dakota; he grew up on a wheat farm and lost his first crop, to rust, at 13! He planted a row of Marquis and one of emmer in the backyard of his landlady's home, both rows flowered July 4, and he missed a picnic to make the famous cross, which he later named Hope. The seed he planted in spring 1917 yielded one germinating kernel! McFadden was also memorialized, or written up, in Reader's Digest the past year, and the magazine made him a \$2,500 award for his service to American agriculture.

Personnel policy

Departmental personnel policy was spelled out in Secretary's Memorandum No. 1202, October 22, which cancelled General Departmental Circular No. 34 and Secretary's Memorandum No. 753, Revision 2. Personnel relations appeals procedure was the subject of Personnel Circular No. 175, October 22. Ask your personnel offices about these documents if you wish further information.

Official Register

The Official Register of the United States, appeared early in December, as required by a resolution of Congress in April 1816. It contains the names of persons occupying administrative and supervisory positions in all branches of the Federal and District of Columbia governments. It lists 9,800 persons, beginning with Olaf S. Aamodt of the USDA employee, E. G. Brewer, who works in East Orange, N. J., and who is "Division Leader in Charge of Field Work on Control of Japanese Beetle and Dutch Elm Disease; and Quarantine Enforcement and Inspection and Certification of Products to Comply with Federal and State Quarantines on Japanese Beetle and Gypsy and Browntail Moth."

Rural planning

The farming community of Odessa, near Elmira, N. Y., has been selected as the site for experiments in rural community planning and building, by officials of Cornell and the New York State Extension Service. It was chosen as an outstanding example of a modern progressive rural community that has developed a superior spirit of cooperation in agricultural, industrial, and other interests, and is a growing community with prospects of continued growth.

M. Bernice Wheeler

Miss Wheeler, who was in Office of Information during the war, working with non-farm magazines which desired information from USDA for the preparation or checking of articles, has joined the staff of Young & Rubicam, New York City. In view of her farm background they properly assigned her to—dry skim milk, as project No. 1.

Elizabeth Spence

You may be interested to learn that this capable gal, formerly with Consumers Guide, and more recently with Rural Electrification Administration, has left for Japan where she will serve with Civilian Information and Education Section GHQ.

Pan American info

The Inter-American Institute of Agricultural Sciences (Turrialba, Costa Rica) issues an Information Bulletin in which you might be interested. It contains information regarding the work and personnel of, and students and visitors to the institute. Address requests for copies to Secretary of the Institute, Pan American Union Building, Washington 6, D. C.

Farmer's hours

The New Jersey Department of Agriculture recently investigated the matter and found that the average work week of its farm operators in September was 69 hours, Sundays and holidays excluded. Thus it compares with the average of 41.2 hours for factory workers. That probably is not news to farmers, but it does help explain why youth leaves the farm. Machinery has been a great aid to the farmer, but he is unlikely soon to achieve a 40-hour week, at least not so long as there are 24-hour days, and cows to be milked, hens to be fed, and hogs to be fattened Sundays and holidays, as well as other days. For seedtime and harvest, cow, chick, and pig, know not Sabbath or holiday. The farmer's work is never done.

Sewall Wright

Sewall Wright, of the University of Chicago, former USDA worker, was recently awarded the Daniel Giraud Elliot Medal, for scientific achievements in the field of genetics, by the National Academy of Science. He developed the modern mathematical theory of biological evolution in work that began in our Bureau of Animal Industry. Consult Research Achievement Sheet 21 (A), available from Agricultural Research Administration, USDA, for details. Dr. Wright was also recently awarded a prize of \$360 and a medal from Oxford, and was the second American ever to receive it.

WHAT OUR SCIENTISTS DO

The January 1948 edition of USDA Document No. 6, Important Recent Achievements of USDA Scientists, is ready for distribution. It consists of a collection of brief and varied items in nontechnical language, telling what our scientists in Agricultural Research Administration, Bureau of Agricultural Economics, Forest Service, Production and Marketing Administration, Farm Credit Administration, and Soil Conservation Service have been doing recently. Ideal not only for writers and editors, but for all employees who want to keep up with USDA's research. For copies write, please do not phone, T. Swann Harding, Office of Information, USDA, Washington 25, D. C.

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USDA

FOR JANUARY 19, 1948

G. Washington, info. spec.

FOR SOME time information specialists have claimed Henry L. Ellsworth, Commissioner of Patents 1836-44, as one of them, because Ellsworth wrote such interesting reports on agriculture that he was finally instrumental in persuading Congress, in 1839, to provide \$1,000 to his Office for the collection and dissemination of plants, seeds, and agricultural statistics. We have also claimed Secretary Jeremiah M. Rusk (who served from March 1889 until March 1893), because he instituted not only the issuance of popular Farmers' Bulletins, but first provided releases of information for the press.

Now we'll boldly lay claim to George Washington. For, when on December 7, 1796, he suggested in his last message to Congress that Federal funds be used in aid of agriculture, he was thinking in terms of the British Agricultural Board. This was a Government-sponsored, privately supported board which sought to collect and disseminate information in the field of agriculture. Washington hoped that we would soon establish such a board "charged with collecting and diffusing information."

Notice that quotation from Washington's message. Compare it with the wording of our organic act which said that the new Department of Agriculture was "to acquire and to diffuse among the people of the United States useful information on subjects connected with agriculture in the most general and comprehensive sense of that word." Both Washington and Lincoln knew that knowledge, whether accumulated from varied sources or created by research, was without power unless diffused among the American people in the form of information. Both Washington and our organic act used the word "information". Obviously Washington was the progenitor of all agricultural information specialists. Arguments to the contrary are now awaited.

Extension Service Review

Of 60 Washington staff members polled recently on the Extension Service Review, 34 recommended changing it to a bimonthly but keeping up or improving the looks of the magazine. But 26 said keep it coming monthly, whatever the cost in format. On other points, 32 voted for a more popular magazine and 16 for a more professional magazine. The majority voted for a magazine which would include articles on all types of subjects in each issue rather than one which would concentrate upon a certain subject in each issue. Too much departmentalization was also voted down. An advisory committee representing all Extension interests has been appointed to work with the Review editors.

Farrington leaves

THE RESIGNATION, as of December 27, of Carl C. Farrington to accept a position in private business is a misfortune to USDA of the first order, for he was an outstandingly valuable and accomplished official. A native of Oklahoma, he had served the Department for two decades, from the time he joined Bureau of Agricultural Economics in 1928. He transferred to AAA in 1934, later to become Assistant Director of its Western Division and its Assistant Administrator. Soon after Commodity Credit Corporation became part of USDA he was appointed a Vice President of it and, in August 1945, he became Director of both the Grain and Feed Branches of Production and Marketing Administration. Since April 1946, Farrington has been Assistant Administrator of PMA, in charge of CCC, as well as CCC Vice President.

Secretary Anderson in a letter to Mr. Farrington remarked that, while the resignation was "not a very nice Christmas present" he must regretfully accept it. He continued: "I am extremely sorry you are leaving the Department. You have done a fine job and I have relied upon your judgment to a great degree. . . . Your resignation, however, points up the problem we have in trying to administer widespread and important programs when we cannot pay salaries that approach the rewards offered to our good people by private industry. . . . You have put in twenty good years for the Department of Agriculture and you will leave it on December 27 with my appreciation, my confidence, and my continued good wishes, wherever you go."

Atomic energy on farms

We have a few copies of the address delivered in Chicago, December 16, 1947, by Chairman David E. Lillenthal of the Atomic Energy Commission, entitled "Atomic Energy and the American Farmer." If you want a copy write, *please do not phone*, T. Swann Harding, Office of Information, USDA, Washington 25, D. C.

War on rats

WAR HAS been declared on rats in every rural community. The campaign is one important phase of the Farm Grain Conservation Program. Occasional skirmishes already are under way in some States, with all-out battles planned before or during spring. Extension Service and rodent control experts of Interior's Fish and Wildlife Service are providing generalship. Since rats spend winter months in and around farm buildings, all rural communities are being asked to have rat drives before spring.

This three-point program is suggested: (1) A vigorous educational program on rats and how to control them; (2) county-wide "R-Days" when rural folks open their offensives; (3) a continuing, long-term program of ratproofing, clean-up of hiding places, and extermination.

Some interesting facts: There are as many rats in the U. S. as people . . . Rats eat or spoil an estimated 200,000,000 bushels of our farm grain yearly, valued today at at least \$500,000,000 . . . Rats begin to breed when 3 or 4 months old and have from 6 to 22 in a litter. One pair's progeny could exceed 350,000,000 in 3 years . . . A rat's front gnawing teeth grow continuously throughout his 2 or more years of life and never wear out . . .

Safest rat poison is red squill, product of a wild Mediterranean plant. Animals other than rats don't like it; if they do eat it, they vomit and generally are unharmed. Rats will eat it mixed with bait; since they can't vomit, they die. Most of the new wartime poisons are effective but are so highly toxic that they must be handled with extreme care. Some are too dangerous for anyone but experts to use. The only way to get permanent rat control is by cleaning up premises and ratproofing buildings. Don Lehman, former USDA press head, has returned to handle information on the Farm Grain Conservation Program.

Dr. Batchelder and corn

THIS IS not the kind of corn you think—or maybe it is! It's Indian maize in the dry, not the somewhat popular liquid form. Dr. Esther Batchelder of our Bureau of Human Nutrition and Home Economics was in Germany not long since (along with two or three other experts) primarily to teach Germans how to use corn for food. But neither they, nor the British, in whose zone the corn landed, knew how to make this so typically American grain fit for human food; it was dried corn, designed to replace the shortage of wheat and other grains.

Dr. Batchelder assumed that the main trouble would be an aversion to cornmeal on the part of the Germans. The actual trouble was that the Germans were trying to mill the corn like wheat, and were beating the very life out of their wheat mills with their efforts, meanwhile producing a gritty, unpalatable meal from which most of the starch had vanished. So she and her associates visited the millers in the British and American zones and told them how to grind corn into meal. They also issued a bulletin telling housewives how nourishing the meal was and how to make cornbread and cornbread dishes.

Dr. Batchelder found that the non-farming Germans who had small gardens also had surplus fruits and vegetables they did not know how to preserve. This was serious, food shortages being what they were so, with the aid of a competent German woman, two technicians, and the laboratory facilities of Heidelberg University, a dehydration method, suitable for German housewives, was worked out. The drying trays were made of wooden sticks used to tie up tomato vines, tied together with ersatz string, in the absence of nails, made in sizes that could be stacked over small electric hot plates. All-told Dr. Batchelder and her associates enabled the Germans to save 120,000 tons of fruits and vegetables from their gardens that would otherwise have been wasted. Cheers and congratulations!

Readable Writing

Your attention is called to the article of this title in December 1947, Journal of the American Dietetic Association; it is by Amy Gronna Cowing of Extension Service, USDA, Washington 25, D. C., who probably has some mimeographed material along the same line that she can send you, if she has no reprints of the article. You should not miss this illuminating discussion of writing that is easier to read than to skip, if you yourself ever have to use the written word to make friends or influence people—or even to write home for money. Mrs. Cowing knows her subject and proves that plain talk pays.

The weaker sex

SMILE WHEN you say the female is the weaker sex, and think of the white-fringed beetle. This ugly critter—it does have a dirty white stripe around it that might be called a fringe—came up from the deep South some years ago (and we do mean *deep South*, South America, that is)—and it is all “Wimmenfolks.” There are no males. To put it eruditely the beetle reproduces by parthenogenesis. While you're hunting that word up we'll dive into another paragraph.

This bug has a lively and a voracious appetite. It is a crop threat of the very first order. For some years our vigilant entomology and plant quarantine people have held it at bay, though it sent a shiver clear up to the Canadian border a decade ago when it invaded Florida as an unwanted tourist. It breeds rapidly, withstands unfavorable conditions admirably, and has an omnivorous appetite for crops. DDT has boosted hopes that a stepped-up anti-white-fringed beetle campaign in 1948 may stay the invader, for the insecticide is effective against both larvae and adults.

Whether it ever will be possible to stamp out the beetle is today's \$64 bug question. This past summer State and Federal entomologists carried on the greatest white-fringed beetle hunt in history; they found it in 12 new Georgia counties and 4 new spots in South Carolina. The hunt extended over 30 States. So far the beetle has appeared in Alabama, Georgia, Florida, South Carolina, North Carolina, Louisiana, and Mississippi. It hitchhikes in soil and miscellaneous products that move out of the infested area. From studies made in South America it appears that the beetle could survive as far north as a line through Philadelphia and Illinois to the West Coast, and it will eat fruit trees, truck crops—onions and radishes included, tobacco, and what have you.

The goosefoot family

Workers at the Missouri Agricultural Experiment Station reported in Food Research, for September-October 1947, that members of the goosefoot family—spinach, Swiss chard, beet greens, and New Zealand spinach, contain much less calcium than members of the mustard family—turnip greens, kale, and mustard greens. As is well-known the high oxalate content of the goosefoots renders their calcium less available to us than that of the mustard family greens. The kid was right in his campaign slogan: Down with spinach! The more calcium in the soil, the more there is in the greens grown therein. Actually, however, the goosefoot-family plants contribute no dietary calcium, according to this work, and the oxalates they contain can cause failure of our bodies to absorb calcium in other foods.

Tomorrow's world

IF OUR cropland were fenced into equal shares, your plot would be smaller than three football fields, say 3 acres, as compared with 4 at the end of World War I, and 2³/₄ in 1970, if population increases as we anticipate—and you are still around and care. So you may think of your future in terms of your diminishing share of our diminishing arable land. Of course, population will not forever continue to increase and soil conservation will help us develop much valuable land and stop erosion on much more.

Today we are still losing our land resources faster than we protect them, while we can bring little more acreage into cultivation through drainage and irrigation. Yet your little patch of cropland (together with permanent pasture and range) provides a higher standard of living than formerly, and enables us also to send a great deal of food to the hungry abroad, thanks to better crop varieties, finer hybrids, improved animals, and more efficient insect control and farm machinery.

We are just beginning now to use in livestock production the principle of hybrid vigor which we have found so successful in plant breeding. Already hybrid hogs are bearing larger litters, making quicker and cheaper gains, and producing a larger proportion of bacon and chops. We are learning more about how to eat for good health. Science is tackling and solving distribution problems. We are making steady progress in applying soil conservation methods. Tomorrow's world is not as bleak-appearing as pessimists make out.

Mechanical brains

Your brain may give you a headache when it refuses to produce solutions to mathematical problems, and you may wish for a mechanical brain. But the fastest automatic computer ever made—now at the Aberdeen Proving Ground, Md.—has its headaches too, though it works only a 2-hour week. During that time the fastest of the computers—Eniac—does 10,000 man-hours of actual work, and could do 200,000 in a 40-hour week, if it could stand the pace. A human computer can achieve only 20 hours of actual weekly output during a 40-hour week, because monotony and fatigue reduce efficiency. Eniac multiplies in 28 ten-thousandths of a second and performs the average operation in two-thousandths of a second. But, during a 40-hour period it runs only 28 percent of the time; of this 5 percent represents useful work, 5 percent checking, and the balance is believed to be wasted, though Eniac is a little secretive about that. Lots of trouble develops in this machine, which contains 30,000 electron tubes. A lot of time is consumed locating the trouble—which may be in the operation or in the machine—and a lot more in routine checks. Eniac has headaches too—and so do those who operate it.

The Leaves

THE PROPHET ISAIAH says that "All flesh is grass," and he's just about right. (Isa. 40:6.) The statement is repeated in I Peter 1:24: "For all flesh is grass, and all the glory of man is the flower of the grass." That is true, because only vegetables can manufacture the highly complex organic compounds required for animal food out of the simple compounds earth, air, and sunshine offer. Animals must eat vegetative matter to live. But did you ever think about leaves?

True, the Eastern Regional Research Laboratory has shown that human beings often discard the most nutritive matter of many vegetables in waste thrown away before marketing or processing, and much of that waste is leaves. But how much of agriculture the world over depends on leaves! Think of tea alone and of the vast quantity of such leaves shipped from such places as Ceylon, China, Japan, and Java all over the world. Again, tobacco is a highly important agricultural plant, and it is the carefully cured leaves that are esteemed by smokers, while they also provide many other substances essential to man.

Then there are the coca leaves that come from Java, Ceylon, and India, mainly for cocaine production. There are the drug-producing leaves of the Brazilian shrub, the jaborandi, which contain much tannic acid and are used to prepare sudorific drugs. The Ephedra shrubs of the Mediterranean countries produce ephedrine, without use of which no cold in the head is complete these days. Sumac leaves are used in tanning and hops are cultivated in the main for the conelike catkins they bear which, when dried, impart flavor to beer.

Before the war there was a big British demand for mistletoe leaves, and the leaves of the beech and magnolia, to dye for decorative purposes. Dry corn leaves are used to stuff mattresses; Britain uses Holland rushes to thatch houses; seaweed finds a market for varied uses. Hemp fibers are obtained from leaves; hard brushes are made from piassave, a variety of palm tree leaves, and raffia is derived from the Madagascar palm, whole Brazilian carnauba wax is obtained from the leaves of certain palm varieties. Leaves are highly important agricultural products.

Less pop

The 1947 popcorn production was the smallest in 7 years—only 96 million pounds—62 percent less than the 253 million pounds produced in 1946, but 18 million pounds higher than 1940 production. The 10-year average is 151 million pounds.

USDA: January 19, 1948

Brief but important

No head for "fingers"

Evidently we are not, or don't have, a figurehead. That number was wrong again on the December 8 issue, back masthead; it should have been volume VI, No. 25—it came out No. 23, because of our positive dearth of numerical talent. The December 22 issue was properly numbered 26, in a burst of year-end defiance.

The Purple Cow

It's been seen—by a sober scientist—but it didn't look too good. Dr. Geo. K. Davis, Florida Agricultural Experiment Station, showed the cow in technicolor at Auburn, Ala., recently, a black animal faded to lavender because of copper deficiency in Florida muck soil. All the cows grazing on the spot changed color a little but only one had the imagination to turn purple. The cows' bones became brittle and their bodies skeletal because copper was lacking in the grass they ate. Once copper was added to the soil fertilizer, cow recovery was quick. Radioactive isotopes from Oak Ridge helped solve this problem.

Farm Implements

You think automobiles are hard to buy? You should try to buy farm implements. Premiums run up to 75 percent on good used equipment and new tractors, disks, and plows are spoken for months ahead. Moreover, unlike pleasure drivers, farmers are forced to replace worn-out equipment. A tractor listed at \$1,600 may actually sell at \$2,670; disk harrows average \$150 to \$175 each and are usually ordered 2 or 3 years ahead. The same applies to cultivators, combines, corn-pickers, and other equipment. If you think farmers are just sitting around automatically getting rich, remember they face inflated prices for everything they buy too and, being primary producers, they cannot stay out of the market at will.

Back from Colombia

Dr. Edward C. Johnson, Dean of Agriculture, Washington State, has returned to the U. S. after nearly a year's absence as head of a mission which was assisting the Government of Colombia to carry out organization programs in the fields of agricultural extension, research, and education. The mission was sponsored by USDA and the Department of State. One recommendation was that the Colombian Extension Service be oriented towards educational objectives; as a result of another, a central office somewhat similar to our Office of Experiment Stations is being organized in Colombia.

Studies under RMA

With initiation of tobacco investigations now under way, intensive studies of opportunities to enlarge or open new export outlets for cotton, tobacco, fruits, and tree nuts, will be undertaken under the Research and Marketing Act. Assigned commodity specialists will conduct on-the-ground studies of foreign market outlets for these commodities under direction of the Office of Foreign Agricultural Relations. You will find details in release No. 2881 for which write Press Service, USDA.

Eleanore Davis

Miss Davis, Extension Nutritionist at Washington State College, has been given a year's leave of absence to fill temporarily the vacancy caused by the retirement of the Federal Extension Nutritionist, Miss Miriam Birdseye. Miss Davis is a graduate of Washington State, and received her master's from Columbia in June 1947.

U. S. Agricultural Policy

You will find in the address of this title, delivered in Philadelphia, December 17, 1947, by Nathan Koenig, Executive Assistant to the Secretary, an admirable review of the subject as presented by top USDA officials. Of course, under our system of Government, it is a basic premise that Congress makes policy, the Executive Branch carries it out. But the speech well summarizes the Department's policy position. Procure copies by writing Press Service, USDA, for No. 2851.

Maurice A. Blake

Prof. Blake, Chairman of the Department of Horticulture of Rutgers College of Agriculture since 1921, and for the same length of time Chief Horticulturist of the State Department of Agriculture, died December 14. A native of Massachusetts and a graduate of Massachusetts State, he had been a member of Rutgers faculty since 1906. His specialty was pomology.

Corn driers

If interested in this subject write to Press Service for its release No. 2867 which gives a digest of a talk by USDA's W. V. Hukill before the American Society of Engineers on this subject, December 16 last. J. W. Simons, also a USDA engineer, addressed the same meeting on experiments in which calcium chloride was used to dry seed grain; ask for No. 2866.

New publications

Technical Bulletin 946, Results of Treating Bovine Mastitis With Sulfonamides Containing Urea, from Bureau of Dairy Industry; Ruth Van Deman's processed publication on the Bureau of Human Nutrition and Home Economics . . . what it is . . . what it does—illustrated by Mary Hope Robinson; Some Questions and Answers on Where and How to Get a FARM, prepared by Marshall Thompson, Bureau of Agricultural Economics, and recently revised—State and Federal assistance to farm buyers all well covered.

Grass roots UNESCO

That's what Kansas has now. A thousand delegates and observers went to Wichita recently to form a permanent Kansas Commission of the United Nations Educational, Scientific, and Cultural Organization. This may be due in part to the fact that President Milton S. Eisenhower of Kansas State is chairman of the National UNESCO Commission. But the other Kansans deserve a lot of credit too.

Operational research

USDA mentioned this subject earlier. Some readers wanted further information. Nature (London) for November 15, 1947, pages 660-62, gives a digest of the discussion on Operational Research in War and Peace, at the 1947 meeting of the British Association for the Advancement of Science, held in Dundee.

Robert J. Manovill

This former employee of Office of Foreign Agricultural Relations left the Dairy Industries Society, International, the first of this year on indefinite leave of absence to serve as Agricultural Economist for the U. S. Allied Military Government of Korea. He will first study Japanese land reforms, made under U. S. guidance, as a background for his work in Korea.

A date

The American Pomological Society, oldest agricultural unit in the U. S., will observe its first century in St. Louis, February 17-19. It was formed in 1848 by Marshall P. Wilder and associates; Wilder also had much to do with the founding of the USDA a few years later.

Reuben Brigham Memorial

It is expected that the Reuben Brigham Memorial will be completed this spring. A contract has been awarded for a sundial of cast bronze, to be mounted on a gray granite pedestal set on a granite base. It will be erected about 15 feet from Reuben's grave in his beloved rose garden. A total of \$333 was collected by the final date for acceptance of contributions, July 31, 1947.

2 1/2 acres per stomach

Dr. H. H. Bennett, Chief of Soil Conservation Service, remarked in a recent address that there are only about 4 billion acres of immediately arable land in this world, with its 2 billion people, and its 20-million annual population increase. In other words that is 2 1/2 acres per stomach, though the figure is 3 acres per gastric organ in the U. S. But that means, or should mean, "a basic rotation of 2 acres per person in intertilled crops and small grain, and 1 acre in grass or other protective or soil-improvement crops. It is essential that we have such a conservation rotation, because land cannot go on producing cotton, corn, tobacco, and other such crops year after year without disastrous damage and depletion."

"Miss Laura F. Shipe"

Some oldtimers may remember Mrs. Laura S. Ethier, who retired from Food and Drug Administration recently after 40 1/2 years of service, under her maiden name of Miss Shipe. She reported for duty in the old Bureau of Chemistry, February 1, 1907, as a clerk-stenographer-typist. Highlight of her career was her promotion to the honorable and certainly never dull assignment of secretary to Dr. Harvey W. Wiley, father of the first Food and Drugs Act and long Chief of Chemistry. Since 1913 she has been in charge of the Stenographic Section, first in Bureau of Chemistry, later in Food and Drug Administration.

Labor Camp Program

Government operation of farm labor camps was curtailed September 30, 1947, for lack of funds, and legally must be discontinued by January 30, 1948. Equipment, buildings, and facilities are up for sale. Under Public Law 298, 80th Congress, first purchase rights go to public and semipublic agencies and to nonprofit farmers' associations. Some of these camps originated in 1935, when Resettlement Administration first began operation of them for migratory labor. Many mobile camps were assembled during the war to aid the wartime agricultural production program. The 52 permanent camps have a capacity for housing 48,600; the temporary camps could house about 20,435. For more details write Press Service, USDA, for No. 2874.

Grain inspector's job

Production and Marketing Administration's grain inspectors—enforcing the United States Warehouse Act of 1916, have to determine the amount, kind, and grade of grain in each container in a warehouse, and take samples to determine the condition and grade. But warehouse stocks may change 15 to 20 times in one harvest season. One elevator under license recently had 309 separate grain containers. It contained 3.8 million bushels of corn, wheat, barley, rye, grain sorghums, mixed grain, and sudan. There were 12 different grades of wheat, 1 of corn, 3 of oats, 3 of barley, 3 of rye, and 8 of grain sorghums. Another warehouse contained 8.8 million bushels of 53 different grades of wheat, 13 of corn, 9 of oats, 16 of rye, 1 each of milo and barley, and 2 of soybeans—in 438 containers! Would you like to be a grain inspector and tackle such puzzles as that?

Tussock moth control

A severe outbreak of Douglas fir tussock moth in our forests of the northwest was quickly brought under control this summer by airplane spraying with DDT. The Bureau of Entomology and Plant Quarantine and the Forest Service cooperated. Billions of board-feet of timber were menaced by the moth. Results better than anticipated were obtained. You will find details on this highly successful and most efficient, not to say economical operation in press release No. 2603; write for it to Press Service, USDA, Washington 25, D. C.

Recent USDA science achievements

USDA Document No. 6, composed of brief, varied items in popular style about important Recent Achievements of USDA Scientists, and very popular among writers, editors, and employees who want to know what goes on in research has been revised, and the new issue dated January 1, 1948 is available. For copies write (please do not phone—use interoffice mail though) to T. Swann Harding, Office of Information USDA, Washington 25, D. C.

The Speakable Cad

You who like words are timidly invited to read the article by this title in the December 1947 Atlantic Monthly. It is by Alan Devoe and it will worry you for weeks with such questions as: Why are invaluable things more valuable than valuable things, and why are inflammable things as easily burned as those which are flammable? Did you ever hear of an unplighted troth, a speakable cad, a pregnable fortress, a pervious roof, a nocuous desuetude, a corrigible child, or a peccably clad gentleman? Did you ever hear of a couth character who spoke unplain language? Did you ever feel vincible or taste sipid food, or smoke satially (or cessantly), or see a home with mense grounds and a kempt lawn? We shall say no more. It all gets too horrible. Read it for yourself.

Hold that calorie

The word is "don't," if you are inclined to middle-aged spread—unless you prefer a shorter life but a more caloric one. Says Dr. C. M. McCay of the New York (Cornell) Agricultural Experiment Station: "Overnutrition may be just as dangerous to health as undernourishment or food deficiencies." Eat less, waist less. Help the food conservation campaign by holding calories in check. Dr. McCay found that when he kept rats thin by forcing them to exercise, they may not have liked the work but they lived longer than their lethargic fellows. Rats which fattened at will had shorter lives than those on restricted calories. Rats kept from early youth on a diet low in carbohydrates lived to an age corresponding to 100-150 years for humans. "Lean bodies of both men and animals live longer than fat bodies and remain healthy and vital longer."

More on isotopes

The Atomic Energy Commission produces and supplies stable isotopes of 29 different elements for use in research. Unlike the radioactive isotopes these do not emit radiations which cause clicks in Geiger counters. They are not byproducts of the chain-reaction pile, but are separated from natural mixtures of isotopic elements. Carbon 13 is one of the most important of them to agricultural research. Unlike their radioactive relatives these isotopes will not be sold; they will be loaned to research workers at \$50 per sample on approved allocations, highest priority being given studies which will neither use up nor adulterate the isotope. Material not returned, or returned adulterated, must be accompanied by a fully explanatory statement.

Shorthand sharps, attention!

Miss Charline Lynch, Office of Personnel, USDA, Washington 25, D. C., has a list of frequently used personnel words and phrases with abbreviated shorthand characters supplied which was worked up by the stenographers and secretaries of Pers. on shorthand forms supplied by the Gregg Publishing Co. They should be helpful to all Government stenographers in all agencies, Washington and field, primarily in personnel work, though many of the characters would apply to much other work quite as well. Write to Miss Lynch for copies of Words and Phrases Frequently Used in Personnel Work.

Ground rules in Sask

I. C. Nollet, Minister of Agriculture for Saskatchewan, has recently announced new rules to govern the distribution and allocation of Crown Lands in that Province for grazing and pasturing purposes. This is done in the effort to aid farm stability by using these lands for the purposes for which they are best suited and which will best serve the community. A sliding rental schedule will be charged, based on distinct classifications of the land, and their relationship to the market price of livestock. Allocations made by the Provincial Department of Agriculture are subject to approval by the local Agricultural Conservation and Improvement Committees, which will carefully consider whether still better economic use could be made of the lands. The lands may be used by individual farmers, as community grazing tracts, for fodder or feed development, or otherwise, and will bear rentals based on their carrying capacity. No overgrazing will be permitted.

TINY THIEVES, BIG LOSSES

Insects eat or destroy 5 percent of our Nation's farm-stored grains and cereal products every year. Their annual board bill runs to an estimated \$600,000,000, paid principally by farmers. "You don't need to share in that loss," says the Department in a Farm Grain Conservation Program leaflet, *Save Farm Grain by Fumigation*, soon to be distributed to farmers. Insects damaging your stored grain can be killed, by you. The way to do it is through FUMIGATION. Step No. 1 is to investigate. Insects are busy in most farm grain bins during warm weather. Step No. 2 is to fumigate. The Bureau of Entomology and Plant Quarantine recommends using a ready-mixed fumigant containing 3 parts by volume of ethylene dichloride and 1 part carbon tetrachloride. It won't hurt grain for use as food, feed, or seed. Mild weather is the best time to fumigate with grain temperatures of 65° to 75°. Six gallons of fumigant for each 1,000 bushels (8 gallons for grain sorghums) is normal dosage. Farmers are warned to be extremely careful not to spill the fumigant on themselves or breathe its toxic fumes.

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USDA

FOR FEBRUARY 2, 1948

Mission to Swan Island

DR. W. T. COLE, a Bureau of Animal Industry veterinarian, recently made what he anticipated would be a routine trip to Swan Island, to select a site for the new International Quarantine Station which is to be erected on this tiny tropical speck in the Caribbean Sea, off the east coast of Honduras. The station, when completed, will accommodate a hundred cattle for observation and diagnostic test, to ensure their freedom from disease before they enter the U. S. or other countries on this continent.

Dr. Cole started from Tampa prosaically enough in a chartered plane, but air-seat belts had to be fastened because it was old, and rocked and vibrated threateningly. Then one of its two motors conked out, though it somehow limped back to Key West, took off again after repairs, then stalled half way to Cuba, yet again managed to get back to Miami. This time the owners lacked funds to get the plane out of the repair shop, so Dr. Cole's party returned to Tampa to embark on a motor vessel which had left ahead of schedule. A plane was used to catch it 8 miles at sea, but this crashed on landing and began to fill, and only a thrilling Coast Guard rescue finally got Dr. Cole's party aboard the cruiser.

Swan Island is an important outpost for the Civil Aeronautics Administration and the Weather Bureau, because of the hurricanes which head up in the region. These agencies have 12 to 15 men there, while the island's population consists of four or five families of some twenty colored people, who are legal residents of Grand Cayman, an island 175 miles to the northeast and under the jurisdiction of Jamaica, to which they occasionally return to maintain citizenship. The natives have evolved their own rules of conduct, their leader being Captain Glidden, to whom they refer as king.

Under Glidden's leadership they service the Government personnel and buildings, fish, weave baskets and hats, and gather and husk coconuts which they ship to the States. They are enthusiastic about the new quarantine station as they feel it may produce a few jobs. While there, Dr. Cole was asked to treat Glidden's wife to ease the pains from a hand badly bruised and infected by husking coconuts; the sedative he used was so effective that the king offered him, not the wife, but a basket of coconuts! When the station is completed BAI will have at least two men permanently stationed on Swan.

Information about USDA

USDA MAKES available to its readers the following mimeographed documents. *Please send in written orders for them and do not phone, whether you are in Washington or in the field, addressing T. Swann Harding, Office of Information, USDA, Washington 25, D. C.* In Washington, use interoffice messenger mail, and in any case, write no formal memorandum—just order by number the documents you want, and give your address. Be sure to mention your agency, which is more important than your room number. Do not order all the documents unless you really need them all, and if you want any in quantities much over a half dozen, we shall have to ask you to borrow our stencil and have them run, or to have your own stencil cut from copies we send you.

No. 1—Origin, Structure, and Functions of the USDA. Last revised July 1, 1947, and the only available publication on this subject.

No. 2—Abridged List of Federal Laws Applicable to Agriculture (Including Reference to Former Functions). Last revised July 1, 1947. The laws are in chronological order, but those relating to the same subject are grouped together.

No. 3—Biographies of Persons in Charge of Federal Agricultural Work, 1836 to Date. Last revised October 28, 1947.

No. 4—Condensed History of the USDA. Last revised January 1948, popularity written: useful for orientation purposes, among others.

No. 5—Our Department Scientists. A popular discussion of past outstanding achievements of some of USDA's most famous research workers in the field of natural science. Is not revised.

No. 6—Important Recent Achievements of USDA scientists. Consists of brief, varied, popularly written items giving accounts of recent achievements in both the natural and the social sciences. Revised January 1, 1948.

A few copies still remain of The Abridged Chronology of Agriculture's Part in the War (May 1940–October 1945), as corrected and revised April 15, 1947. Covers changes in structure and activities of the USDA as affected by World War II. Good for your reference file.

Federal scientists

DR. W. V. LAMBERT, who heads Agricultural Research Administration, spoke December 29, before the American Association for the Advancement of Science, on the administration of Federal research. Dr. Lambert said:

One of the difficulties that every Government research administrator has to face is the job of replacing key people who are enticed away from Government research by flattering offers from industry. I am convinced that we shall have to give greater recognition to our scientists—not only in terms of better salaries but in other ways such as sabbatical leave.

A USDA research worker may spend 7 years preparing for his career, as much time in college and university as a person who intends to practice medicine. He or she may then expect compensation considerably below that earned by skilled laborers. If, however, research workers are exceptionally competent, they may come to earn as much as a skilled mechanic! Only a few can work up to become project or division leaders, as the openings are infrequent. Moreover, those so advanced usually earn this advancement by their administrative rather than their research abilities, which is well, because administrators lack time to do original investigations.

Said Dr. Lambert, the Federal research program must be so organized as to provide the greatest possible freedom and latitude to the scientific staff. Everything must be done to promote scientific teamwork and a close working relationship with those served by research programs. Basic research must be further encouraged; red tape and paper pushing must be reduced. Dr. Lambert concluded:

Physical science has accomplished miracles in lightening the burdens and prolonging the life of man. But it has advanced far beyond the social sciences. Man's knowledge is badly out of balance. We cannot stop at this point and turn back. The only hope of bringing it into balance and holding to the gains we have made is by pushing ahead on the weak side. We must not do it by holding back on the strong side.

Shapely molecules

YOU DIDN'T know that molecules had shapes? They do. The molecules of your hair are curled up like springs, but they can be straightened out when the hair is stretched, and the application of heat and moisture will keep them so, thus producing the "permanent wave." The molecules of wool also tend to be curled up and tied together with what chemists call side linkages, but steam breaks them open, which explains why wool holds its shape after pressing.

Wool, silk, and mohair are proteins. Like meat and egg white they are made up of different amino acids chained together in various ways. Naturally man decided to use proteins when he sought to make synthetic fibers. But the strength of a fiber depends upon such things as the length of its chains, the number of amino acids composing it, and the shape of its molecules. The proteins of soybeans, peanuts, casein, and cottonseed tend to be globular in shape, and it is the devil's own job to straighten them out in the linear fashion which makes a good strong fiber.

On that job many Department scientists have worked. They use the X-ray and other devices to trace the conversion of protein molecules from the globular to the esteemed fibrous state. They use various curing treatments—something like tanning leather—to impart greater wet strength to the protein fibers they produce. They make from milk casein a protein fiber which does resemble wool, but has lower tensile strength. Their problem is to produce a synthetic fiber with a specific set of desirable characteristics by selecting and arranging molecules so that these properties will appear.

Another approach to the problem was recently tried by a Harvard research worker who, for the first time, succeeded in putting so many amino acids together into chains that he made what were essentially synthetic proteins, though he carefully called them "protein analogues." Earlier investigators had never succeeded in getting more than a score of amino acids chained together; this investigator made chains of 10,000 or more links. He thus made big molecules out of little ones (polymerization is the technical term) and in time our scientists too may produce fibers by constructing synthetic protein molecules of precisely the shape and properties they want. Then amazing new fabrics with novel characteristics will astound milady.

Green leaf's secret

SAID a New York Times editorial (December 30, 1947):

An acre of corn exposes about two acres of leaf to sunlight. If on that one acre a hundred bushels are grown, these leaves produce with the aid of sunlight about seven tons of material, including three tons of carbon, which was made by taking eleven tons of carbon dioxide out of the air. And corn is only one of the countless plants that make food out of carbon dioxide and sunlight. There are no roaring furnaces, no machines to produce high pressures, no forcing of molecules to enter into new combinations in the world's greatest chemical business—the business of photosynthesis.

If our scientists can find out how Dame Nature turns this trick the possibility of food synthesis at will stands before us. An advance was recently made in this field by scientists at the Fels Laboratory, University of Chicago, using radio isotopes containing tracer atoms, prepared at Oak Ridge. They caught Nature in the act of converting the carbon in carbon dioxide into sugar or starch. Hitherto it has been supposed that, with the aid of chlorophyll, the green pigment of plant "blood," formaldehyde is first formed, then sugars and starches.

But the Chicago investigators discovered an as yet unidentified precursor, an intermediate that must be present if the plant is to live. It works in the dark, though true photosynthesis later takes place in the light, so carbon dioxide seems first to be used for plant respiration, then later for the making of carbohydrates. The carbon dioxide used in this work contained radioactive carbon 14 instead of ordinary carbon, and it can be traced with the Geiger counter. Very gradually and almost stealthily the scientists are peeping behind Nature's green curtain to ascertain what goes on there. Our own USDA investigators are also active in this field.

Helmer Rabild

The man who placed the foundation thirty years ago for our present dairy-herd-improvement program, Helmer Rabild, died New Years Day at his home in Titusville, Pa. A native of Denmark, he came to this country in 1898, was naturalized, and operated a nearby creamery while he attended Michigan Agricultural College. In 1905, he became an inspector for the Michigan State Dairy and Food Department, and, while so engaged, took leave to induce a group of Neyago County farmers to form a co-op association for testing their cows and recording production. This idea stemmed from Denmark. By 1908 the USDA saw need for spreading the program and Rabild was employed to introduce and develop the work. He resigned after 16 years to manage a milk plant and creamery at Titusville. He saw the movement he fostered grow from 239 cows tested the first year to 775,546, in 1946; respective butterfat-production figures were 215 and 349 pounds.

Research repeats?

IT SEEMS sometimes as if scientific research were truly re-search—a search for something already found, possibly entered illegibly in the worker's notes, possibly published obscurely, or forgotten. University of Wisconsin investigators reported at the December meeting of the American Association for the Advancement of Science that plants, like animals, have "cancers." These growths are really crown galls, unorganized proliferations of cells resembling cancer in human beings, but bacteria spread them from plant to plant.

When some 5,000 plants were infected with weakened preparations of these bacteria, small relatively benign or harmless growths resulted. But when these specimens were treated with recently developed plant growth regulators, sometimes mis-called hormones, the galls became large, distorted, cancerous. Thus the malignant changes were brought about not by any change within the cells themselves but by growth substances in the plant body. This may have an interesting bearing on the human cancer problem.

Many years ago USDA's Erwin F. Smith, who had founded the science of plant pathology (phytopathology) before the turn of the century—a versatile and classically learned scientific genius he was—published a number of papers calling attention to the relationship between plant tumors, or galls, and human cancer. For this he was honored in 1913 with a Certificate of Merit from the medical association. He did revolutionary work on fusarium diseases and on crown gall and, as early as 1920, he forecast such things as penicillin.

Aerial soil mapping

Today soil mappers fly through the air with the greatest of ease while mapping the landscape below as they please. But all this began very simply about 1917, when some volunteer observers trained by the Army Air Force began to jot down features of the earth as it appeared in a bird's-eye, in lieu of the more customary worm's-eye view. But the "terrific" speeds of 60 miles per hour and the fact that they were really supposed to be doing something else rendered this difficult. Later photographs were crudely taken from the wobbling planes. But, in 1926, Mark Baldwin and T. M. Bushnell, who had been in the AEF, sought seriously to interest the Air Force in the possibilities of aerial photographic soil mapping. By November 1929, Jennings County, Ind., had been mapped entirely. The expense was high but the product was worth it. Soon AAA and SCS got into the thing in earnest, techniques were greatly improved, and the Soil Survey men, who recognized the validity of this method thirty years ago, were vindicated in full.

Brief but Important

Research projects approved

Four research projects with the marketing and processing of three farm products—poultry, meat, and wool—have been approved recently under the Research and Marketing Act. One will seek to improve egg-processing facilities and practices. In another project, the Farm Credit Administration will work on ways to improve processing of live-stock and poultry products in cooperative plants. The object of the third is detailed information on developments in the use of improved-type hogs. In the fourth project, the Production and Marketing Administration and the Bureau of Agricultural Economics will cooperate in analyzing domestic wool requirements and sources of supply. For details write Press Service, USDA, for No. 2910.

The stretch in fabrics

Familiar as knit fabrics are—sweaters, hose, close-fitting underwear, and gloves, for example—the textile and clothing industries lacked scientific information to use in producing the best material for elasticity, until textile specialists of the Bureau of Human Nutrition and Home Economics got busy. Dr. Hazel M. Fletcher and Pearl A. Gilmore have been conducting tests that have proved, for instance, that the elastic come-back of fabrics cannot be predicted by knowing that of the yarns. Nylon yarn is far more elastic than wool or silk, but just the reverse is true of fabrics made from these yarns. The very way in which the fabric is knit also affects the elasticity. Tests in this pioneering work have so far yielded valuable data on the stretch and come-back of a variety of yarns and plain knit fabrics.

Phytopathology

The Potomac Division of the American Phytopathological Society (these are plant pathologists, in our language) meets at Plant Industry Station, February 11-12. Victor F. Tapke, of PISAE, is the Division's President.

Personnel officers meeting

The Office of Personnel has made available a report of the third national meeting of the Personnel Officers of the USDA, at hurricane-swept Biloxi, late in 1947. Results of the meeting were most satisfactory, 98 recommendations were made—many to be put into effect at once, and progress in personnel policy was greatly accelerated by cooperative effort. Your personnel officers can give you more details about this report.

Poor speaking

Harold F. Harding of Ohio State has done a jolly article entitled "The Principles of Poor Speaking," for January Scientific Monthly. It discusses the rules you should follow to become an execrable speaker. There is a helpful bibliography. We have secured a few reprints; first-come first served; write (please do not phone) Editor of *USDA*, Office of Information, USDA, Washington, 25, D. C., for not more than one!

Returned

Willard (Doc) Lamphere has returned to Information Branch, Production and Marketing Administration, and will head the division in charge of farm programs on the production side, the Agricultural Conservation Program and others related thereto.

Kansas State FHA

Walton Dodge, hitherto located in Farmers Home Administration in Washington, has become Kansas State FHA Director. He is an oldtimer in the organization and those that preceded it and has served in various administrative positions in Washington.

Carl Hamilton

Assistant Administrator Carl Hamilton of Rural Electrification Administration has resigned to return to his native Iowa and newspaper work, after being with USDA nearly a decade. A graduate of Iowa State, he was first a member of the AAA information staff, and, in 1940, became Assistant to the Secretary; he has held his position in REA for 2½ years. He is succeeded by Geo. W. Haggard, a native Texan, well known in rural electrification and co-op circles, and for the past 2½ years general manager of the Texas Power Reserve Cooperative, at Austin, a federation of 100 Texas REA-financed co-ops. Mr. Haggard is a graduate of Hardin-Simmons University, Abilene.

Reference material

A list of reference material, its sources, and the number of copies available, was recently supplied the USDA State Councils to aid them in their discussions of long-range agricultural policy and programs. The Information Branch of Production and Marketing Administration, the Bureau of Agricultural Economics' Division of Economic Information, and the Division of Extension Information in the Extension Service could supply you with lists of this material if you are interested. Or ask to see a copy of USDA Council Memorandum 47, December 16, signed by W. A. Minor, Assistant to the Secretary; apply through your own agency channels.

Subtilin

A scientific report on the antibiotic activity of subtilin, obtained from the Biochemical Division, Western Regional Research Laboratory, appeared in *Science* for December 26, 1947. The work was done in the Pharmacological Laboratory, University of California Medical School, in San Francisco.

Dairy projects

Four Research and Marketing Act projects in the dairy field have recently been approved, in three of which Bureau of Agricultural Economics and Farm Credit Administration will cooperate with the Dairy Branch of Production and Marketing Administration. The fourth project will be in the hands of the Bureau of Agricultural and Industrial Chemistry, which will handle it largely at its Eastern Regional Research Laboratory. Ask Press Service, USDA, in writing, for No. 2931 if you want details.

Australian Farmers to Visit U. S.

The bonds of agricultural interest between Australia and the U. S. will be further strengthened early in 1948 by the visit to this country of three contest-winning farmers from the "down under" commonwealth. A Progressive Farmer contest has been arranged by the Rural Bank and the Agricultural Bureau of New South Wales to select the three farmers. Expectation is that one of the visitors will be a dairy farmer, one a mixed farmer or a wheat grower with some cattle, and one a fruit or vegetable producer or a hog or poultry farmer.

Ag history

The Committee on Agricultural History was reconstituted by Revision 1 of Secretary's Memorandum No. 925, dated December 26, 1947. The work of the committee as originally designated July 9, 1941, was suspended during the war. See the memorandum for membership of the committee.

Office terminated

Executive Order 9913, December 26, 1947, terminated the Office of Scientific Research and Development and provided for its complete liquidation. Executive Order 9912, December 25, 1947, established an Interdepartmental Committee on Scientific Research and Development and defined its duties.

Report on Syria

Copies of the report on Syria drafted by the U. S. Agricultural Mission to the Near East are now available, and can be obtained from the Publications Division of the U. S. Department of Agriculture's Office of Foreign Agricultural Relations, Room 5918 South Building, Ext. 2445. The report was prepared by a Mission composed of U. S. agricultural technicians, sponsored jointly by the U. S. Departments of State and Agriculture, which visited Syria and four other countries of the Near East by invitation in 1946, and collaborated with officials in the countries visited in matters relating to agricultural problems and developments.

Dillon S. Myer

Mr. Myer, a native of Ohio, who was connected with the agricultural extension work in that State and at Purdue, and came to Washington in 1934 as an Assistant Chief of Soil Conservation Service, has yet another new job. Since leaving USDA he has served as head of the War Relocation Authority and Commissioner of Public Housing Administration. The first of this year he became President of the Institute of Inter-American Affairs and of the Inter-American Education Foundation, both of which are responsible to the Secretary of State.

RMA projects

Four projects have been approved under the Research and Marketing Act. They are studies of the effect of production risks on farm costs and income, and of reducing the costs of such risks; of the factors affecting the use of electricity on farms and stimulating greater use to increase earnings; of economic effects of transportation costs on agriculture; and of improvement in transportation of farm products. Bureau of Agricultural Economics, Production and Marketing Administration, and nongovernment agencies will cooperate; procure release No. 9 from Press Service for details.

Organization charts

New organization charts—block and functional—showing the structure of the Department of Agriculture in somewhat more detail than was possible when we last offered a chart have been prepared and made available by the Office of Personnel. If you want not more than half a dozen copies—or less of either or both—you may write T. Swann Harding, Office of Information, *USDA*, Washington 25, D. C.

Death takes no holiday

The death is announced, December 23 last, of Arthur Gordon Ruggles, former collaborator of the Bureau of Entomology and Plant Quarantine, at Union Springs, Ala. He was State Entomologist of Minnesota and Professor of Entomology at its University until his retirement to Alabama, in 1942. He worked with EPQ on chestnut blight as early as 1919. His son, Dyer N. Ruggles, is with Soil Conservation Service in Alabama.

Rubber

Inflation seems to come naturally into any discussion of rubber, but the price of radioactive carbon has fallen from a million to only \$50 per unit since before the war. This is one reason why the Botany Department of Cornell University is using it to find out how rubber plants make rubber.

Spring semester

The USDA Graduate School has mimeographed fliers announcing its courses for the spring semester, courses so varied that some of them are bound to interest every employee. For information apply to the business office of the school, Room 1031 South Building, *USDA*, in person or by writing. Give the office an idea of your interests; it almost certainly has a suitable course for you.

Science and Public Policy

Printed copies are now available of the five different volumes of the report prepared by the President's Scientific Research Board, of which John R. Steelman was chairman. They may be had from the Superintendent of Documents Government Printing Office, Washington 25 D. C. Volume 1 A Program for the Nation sketches the country's position in scientific research and development and its needs (20 cents). Volume 2, The Federal Research Program, reviews the details of the Government's scientific work, agency by agency, giving the history, administrative set-up, expenditures, and a discussion of typical projects (55 cents). Volume 3, Administration for Research, is concerned with how the Government can most effectively administer its vast scientific research and development program with particular emphasis on that part conducted in the Government's own laboratories (55 cents). Volume 4, Manpower for Research, takes up the shortage of scientists and scientist-teachers for the colleges and universities, its implications and the steps that must be taken to relieve it (35 cents). Volume 5, The Nation's Medical Research, discusses programs in medical and allied sciences and medical research problems inside Government and in the Nation as a whole and also outlines the Federal program and its administration (25 cents).

The Story of Ethylene

The article of this title in the *Scientific Monthly* for October 1947 is by Erston V. Miller, until recently a USDA plant physiologist, and is recommended to your attention. It covers the use of this gas in the coloring and ripening of fruits, and related subject matter, with complete historical background.

Fertilizer Situation

Production and Marketing Administration has issued its processed publication on *The Fertilizer Situation for 1947-48*. Apply for it to PMA's Information Branch.

The elusive food \$

When you spend a dollar for food, who gets it? How is it shared by groceryman, wholesaler, processor, shipper, farmer, and others? The "middleman" may get half of the dollar, but does he keep it? You will find a readable, comprehensive, and authoritative discussion, by O. E. Umsted, of "Where the Food Dollar Goes" in *Marketing Activities* for November. Address inquiries to its editor, Production and Marketing Administration, USDA.

Startling

Surprising facts about population, agriculture, peace and war will be found in a little book called "Human Breeding and Survival—Population Roads to Peace or War" by Guy Irving Burch and Elmer Pendell. Burch is Director of the Population Reference Bureau in Washington, D. C., which sells the book for 35 cents. It is a Pelican Book, published by Penguin Books, New York City.

Extension RMA projects

New educational and local demonstration work in marketing is the objective of three new projects under the Research and Marketing Act, funds to be allotted to State Extension Services through the Federal office. For details of projects and States cooperating procure No. 29 from Press Service, USDA.

PCA-NFAL meeting

The editor, as a guest, attended the joint Annual Stockholder's Meeting of the Richmond Production Credit and National Farm Loan Associations, January 20. It was a pleasure to meet with these associations, and to enjoy the good earthy feel of them as the members listened attentively to their progress reports for the past year.

Work conditions

The Commerce and Industry Association of New York recently made a study of personnel practices by employers in the metropolitan area. The average length of employee service was found to be 8½ years; 95 percent of the employers surveyed observe a 5-day week. Between September 1, 1944 and the same date in 1947 median rates for junior file clerks rose from \$23 to \$31, and for messengers from \$21 to \$29 a week. These rates were \$32 and \$30, respectively, on December 1, 1947. Only 12 out of 331 companies gave their employees a formal cost-of-living bonus; other firms tried to cover this by salary increases.

Houseflies and DDT

Workers in our Bureau of Entomology and Plant Quarantine Laboratory at Orlando, Fla., have successfully bred strains of DDT-resistant houseflies which transmit this resistance genetically. These flies can withstand twice as much of the insecticide as will kill off ordinary houseflies. This does not mean that DDT has become less lethal, or that flies generally are more resistant for the resistant strain of flies was produced from hardy, robust individuals (big-muscle flies no doubt) which could also withstand other insecticides better than their puny relatives. Though no such resistant fly strains are known in nature, it has been reported that houseflies are becoming more difficult to kill with DDT in several parts of the U. S. and in some foreign countries. But EPQ scientists have research on the way in their control too. For more details ask Press Service, USDA, in writing, for No. 2960.

Tobacco-curing project

Development of a new type of curing for bright-leaf tobacco, to reduce labor and fuel costs while improving quality, is the aim of a newly approved project under the Research and Marketing Act of 1946. The work is to be done at the Tobacco Experiment Station, Oxford, N. C. You will find details in release No. 2956 for which write to Press Service, USDA.

Project completed

Results of the on-the-spot check which covered the marketing of Colorado boxed peaches in St. Paul and Minneapolis have been released in one of the first reports of a project completed under the Research and Marketing Act of 1946. The survey demonstrated current consumer preferences for firm-ripe peaches in the customary large or small—not in-between—size containers, and that the advertising of Colorado peaches for canning has been effective in the Twin Cities.

Medical department

Pliny credited the onion with the ability to remedy 28 maladies, a moderate figure compared with his 87 for cabbage. Recent work indicates that certain constituents of the onion do have value in the treatment of wounds. When you remember the investigators at Yale have found more than 300 different chemical compounds in the tuberculosis bacillus, a one-celled plant, you can see that the onion has great possibilities. See the lead article in *Science*, December 26, 1947, for details: It is entitled "The Chemical Components of Onion Vapors Responsible for Wound-healing Qualities."

USDA in medicine

Speaking, January 7, before the American Medical Association in Cleveland, the Secretary reviewed the work performed by the USDA in the fields of the science and economics of medicine. The address was entitled "The Farmer in Apollo's Temple," and a reading of it will probably surprise you about the extent to which our Department is an institution of medical research. For copies write Press Service, USDA, and ask for No. 5.

The fir Douglas

You have undoubtedly heard of the Douglas-fir. Recently a biography of botanist David Douglas, whose name is attached to the fir, appeared, entitled "Douglas of the Fir." It is by Athelstan George Harvey and was issued by the Harvard University Press. Douglas was a Scot who remained a bachelor throughout life, his romantic attachment being to plants and trees. He first saw the giant that bears his name in 1824; though not the first to observe it, he gave the first full description, and a Douglas-fir still stands in Scone, Scotland, set out from his seed more than 120 years ago. He explored much of the New World, finding many plants and trees that were novel to the Old. He died tragically in Hawaii in 1834, when not yet 35. Procure the book from bookstores or libraries.

Korean lespedeza

Research Achievement Sheet No. 88 (P) tells how a package of seed from Korea, received by the Division of Plant Exploration and Introduction in 1919, from Dr. Ralph Mills, a medical missionary, gave this country a new crop which now grows on more than 40 million acres of our eastern farm land. It cost perhaps \$75,000 to get the crop introduced and started. The lespedeza seed crop is now worth over 20 million dollars annually; the hay crop and the lespedeza pasture run another 100 million each. Procure the sheet from Agricultural Research Administration.

Newcastle disease diagnosis

Streptomycin has proved valuable in facilitating the diagnosis of Newcastle disease. Drs. C. H. Thompson, Jr., and O. L. Osteen of the Bureau of Animal Industry have recently developed and described a laboratory method used to identify Newcastle disease and to distinguish it from several other poultry diseases with similar symptoms. The antibiotic effect of streptomycin is an adjunct to the test, as a weak solution of it can be used to dispose of various contaminating bacteria without injury to the virus of Newcastle disease.

Photographing British Colonial Empire

It's a big undertaking, and will take a long time, but Britain eventually will have a complete aerial map of its far-flung Colonial Empire. The British began the tremendous task of aerially photographing their Colonial possessions sometime ago, as a part of a long-term Colonial Development and Welfare Plan. The project started in West Africa, and now 300,000 square miles are being photographed in East, Central, and South Africa. It will be years before all of the 2,215,000 square miles of the British Colonial Empire can be photographed, and the mapping being done now is of areas in which some particular economic development is under way, or definitely planned. The mapping in East and Central Africa, for instance, includes the survey of areas for determining the extent of soil erosion, the possibilities for growing peanuts, and mineral potentials.

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USDA

FOR FEBRUARY 16, 1948

Meetings

IF YOU HAVE been a member of the Department's staff very long you have attended many meetings. You have also attended good meetings and bad meetings, here and in the field. Undoubtedly you have attended some where the presiding officer was ill-qualified, the speakers were uniformly inaudible, the arrangements were inadequate, and the audience was moved by a wild burst of apathy, discussion from the floor being all but nonexistent. This experience will tell you that you cannot simply throw a meeting together and expectantly wait for it to come to a boil. Like a good pot of soup, a meeting must be planned.

Time and energy expended in planning meetings is never wasted. First of all see that your notifications to attend have drawing power. The best way to ensure that is to plan a well-coordinated program which moves logically from point to point until it covers everything. Lacking the brains or the industry to plan the meeting well, you may fall back on entertainment or a big dinner to get the crowd, but a meeting that provides only food and laughs cannot accomplish its purpose.

Select your chairman well. Possibly some member of the organization would make a better chairman than the president. Somehow contrive to make him or her the chairman. Select your speakers with care. Not only must they know their subject, but know how to present it. They should not listlessly and lethargically rattle through a lot of facts and figures in a way to indicate they were wholly bored. Nor should they merely talk to themselves. They must make themselves audible to the audience. Stimulate floor discussion by arranging in advance with two or three articulate members to stand and make specified comments at specified times.

Nothing falls flatter on its face than an unplanned meeting with an unqualified presiding officer, bored and inaudible speakers, and no floor discussion. Avoid an outbreak of general apathy by following the above prescription which is predicated on the assumption that in holding the meeting you have something worth meeting about and warranted to merit and to arouse enthusiasm.

To Korea

Edna Miencier, Plant and Operations, supervisor of telegraph in USDA, left January 13, 1948, for Korea, where she will be supervisor of telegraph for the War Department at Seoul. She sailed from San Francisco for Seoul, Korea, about January 19.

Second-class citizens?

SPEAKING BEFORE the Economic Club in New York City, January 14, Secretary Anderson remarked that:

Those who think "bureaucrats" are fair targets for any sort of reckless accusation tend to undermine the government they say they want to improve. Reckless accusations can help to make government become what its worst critics claim it is. Continual sniping and carping, combined with rigid low limits on salaries of top-grade people, discourage even the tough-hided public servant.

The combination of unrealistic criticism and low pay tends to get the best of public servants in the end. They finally accept more lucrative offers or simply chuck their government jobs to get a little freedom. Said the Secretary: "I don't see the logic in demanding businesslike administration and at the same time making it almost impossible to achieve." He then discussed Government personnel from the standpoint a businessman would adopt in his own organization, and observed that he simply could not adequately remunerate the top men in his "firm." For his "board of directors" held that nobody in the career ranks is worth more than \$10,000 annually, regardless.

Next the Secretary took Commodity Credit Corporation as an example. It averaged from 1942 through 1946 slightly more total assets than General Motors, inventories twice as big, and almost as big a sales volume. It also carried on subsidy, loan, and purchase activities, quite unlike any undertaken by private industry. You would have to combine 10 of the largest corporations purchasing, processing, and distributing agricultural products to equal the CCC, the total assets of which, 1942-46, were more than 2 billion dollars.

Yet—except for the Secretary—the CCC business has to be conducted by men who make \$10,000 a year or less. One of its top men left recently to join

a grain firm doing only a tiny fraction of CCC's business, he went at much more salary. The USDA as a whole has lost one-sixth of its top people through resignations during the past 2 years. Hence, business gets the pick of the Nation's administrative talent, for Government cannot compete on even terms. Nor can the confidence of top employees be permanently maintained if you say to them, "You may be worth \$15,000 but I'll pay you 10. On top of that I'm suspicious of you. I think you're a liar and a cheat. Now do your best for me!" Yet, that is the attitude the employees of the Nation have too frequently to face.

As the Secretary continued, "The Nation needed the shock administered recently by Chancellor Robert M. Hutchins, of the University of Chicago, when he advised faculty members and graduates not to enter Government Service." The Secretary also discussed so-called "inside information" USDA employees are erroneously supposed to have, and the frequent charges of "government propaganda." Said he:

A large share of the work Congress directs us to do is authorized for the sole purpose of giving new facts to farmers, consumers, and industrial concerns. Neither research nor action programs can produce results worth the money if you don't keep the public informed. Citizens depend on us for information. For example, our bulletin room alone gets 3,000 letters a day. And yet the Department people are frequently criticized for doing the very job they have been ordered to do. Strangely enough some of those who shout loudest that the government ought to tell the people more are the most vociferous in charging us with issuing "propaganda," especially in election years.

Get the press summary of the speech and read it. Ask Press Service, USDA, for No. 107.

Forest resources

Copies are available of the talk on Our Forest Resources, given by Chief Watts, Forest Service, November 24, 1947, in the Graduate School Series on Agricultural Programs. Procure copies from Division of Information and Education, FS, USDA, Washington 25, D. C.

British research

IT SEEMS obvious that we might learn much from British research, as the United Kingdom's people rather closely resemble our own. The total annual expenditure by British industry on research and development within its own establishments is about 30 million pounds, which represents two-thirds of 1 percent of the annual volume of British manufacture. The national expenditure on research is estimated at 69 million pounds. The Department of Scientific and Industrial Research expends 3,118,289 pounds, other Departments about 1,500,500 pounds. For Post Office research 750,000 pounds were estimated, for agricultural and fisheries research 2,150,925, for medical research 710,850, and on research and development for the Admiralty and the Ministry of Supply 60,351,000 pounds.

Further details on this will be found in the lead article in *Nature* (London) for December 20, and in an article entitled "Organization for Scientific and Industrial Research," in the same journal for December 27, 1947. Joint Publication No. 10 of the Imperial Agricultural Bureau for Pastures and Field Crops, Forestry, and Animal Nutrition, offers interesting material, under the title "The Use and Misuse of Shrubs and Trees as Fodder." The 26th annual report of the Scottish Society for Research in Plant Breeding will interest specialists in this field.

Also of interest to agricultural workers are the recent 1945 annual report of the Agricultural and Horticultural Research Station at Long Ashton, Bristol, on fruit and vegetable culture; the thirty-first annual report (1945) of the Cheshunt Experimental and Research Station (Turner's Hill, Cheshunt, Herts, 1946), on the pathology of certain greenhouse crops—tomatoes especially. See, in addition, the article page 914 of December 27, *Nature*, on the "Future of Agriculture in Britain."

Phone's ringing again!

YOU'RE OUT TOO, when it rings. Does your girl tell the caller that you are out, but your assistant, Mr. Seuffie, is in, hold the line—and then she finds he isn't in either, and she tells the caller that? Does some other person's secretary call you and say: "Mr. Crabcake, Mr. Beetle is calling you. Just one minute, please." And then you wait for Mr. Beetle, who cannot waste his time but doesn't mind wasting yours at all, to come on the line? Do such things happen in your life?

But why leave your office without leaving a message, so that the girl can say "I'm sorry but both Mr. Crabcake and his assistant, Mr. Seuffie, will be out until 2:30. May I take a message or have one of them call you when he returns?" Nor do those who use the arrogant just-a-minute technique in the second instance above usually realize the resentment they thus create, and that this inconsiderate conduct makes enemies and alienates people.

Telephone rules include: Answer promptly; identify yourself and your organization immediately and properly; hold the receiver correctly; and use a natural, pleasant tone of voice. Don't leave the vicinity of your phone without leaving a message. Keep pencil and paper handy, and don't keep the other fellow waiting while you rummage through your desk to find them. Don't abandon a caller, but have your girl lilt at him occasionally: "I'm sorry, sir, but that line is still busy." Stay on the line and avoid Mr. Beetle's faux pas. Terminate your conversation clearly, though not rudely or abruptly, and hang up carefully so as not to burst the other party's eardrum.

(Did you think we thought that up? You'll find all the above, and more, in *Printers' Ink* for December 26, 1947, in an article on telephone tips, pg. 36).

Blind typist

THAT MAY not seem novel to you. You may know many typists whom you regard as blind. But, in the offices of the International Business Machines Corporation in New York City, there is a physically blind typist who does exceedingly well. Blinded through an injury that occurred when she was but 4 years old, she finished grammar and high school and began to learn how to type while in the former. Later she took special training for handicapped workers in the business corporation, and mastered dictaphone typing.

Is she accurate? *She has to be accurate.* There is no other way out, because she cannot correct her errors in copy. Says her supervisor, her work must be letter-perfect, because she cannot make erasures, but she concentrates well; has acute hearing, and not even the most difficult names and words stump her. Furthermore, she is gay and light-hearted and gives the entire office a lift. This shows what severely handicapped workers can do, also what can be done for them. This blind girl fills her post as typist eum laude.

Brief but important

About USDA

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Tracer phosphorus tells all

Well, maybe not quite all, but *USDA* scientists will soon expand their investigations with radioactive isotopes to study the response to applied phosphorus of pasture grasses, soybeans, sugar beets, and corn. Interesting results have already been reported on potatoes, corn, cotton, and tobacco, at different stages of growth. Drs. L. A. Dean and S. B. Hendricks, Plant Industry Station, Beltsville, have charge of the study for their bureau. North Carolina, New York, Iowa, and Colorado Agricultural Experiment Stations are cooperating. By the use of tracer phosphorus the scientists can tell whether the phosphorus in a plant comes from the soil or from the fertilizer used to enrich it. For more detail get No. 54 from Press Service, *USDA*.

Mysterious common cold

Before, while, or after reading this you will have or have had a cold. Everybody known to medical science has colds, except one employee of *USDA* who—as yet unknown to medical science—has never had one in her life. Her name must not be mentioned or she might get a cold! In 1928, Dr. A. Raymond Dochez of Columbia proved pretty conclusively that colds are caused by viruses, not by bacteria. Colds also are contagious and break out in many isolated regions of the world only when a cold sufferer visits them. Colds should no longer be attributed to miasm, bedbugs, face powder, cats and dogs, acidosis, wet feet, or chilly, damp weather. As yet no drugs or vaccines are really effective against colds, and this includes penicillin, sulfa drugs, antibiotics, and whisky! Anything that lowers your body's resistance tends to make it easier prey to any germ or virus. Eat well, sleep well, avoid undue fatigue and overexertion; this, at least, will help you prevent contracting colds.

Popular nutrition facts

A monthly leaflet entitled "Current Research in the Science of Nutrition" is being published and distributed free. It is a survey in popular, readable language of recent advances in the science of nutrition, running two or three pages in length. The leaflet will be sent to anyone on request. All you have to do is write in and ask to be placed on the mailing list. Address The Nutrition Foundation, Inc., Chrysler Building, New York City 17.

Statement to FAO

Secretary Anderson's statement at a meeting of the Policy Committee on Production and Distribution, Council of the Food and Agriculture Organization, January 8, is available from Press Service; ask for No. 55.

Meeting the Public

There is an article that would benefit all of us in Fire Control Notes, for January, published by Forest Service, USDA. It is entitled "Making Contacts and Establishing Good Will," and is by State Forester C. H. Coulter of the Florida Forest Service. Note especially the part on Meeting the Public. Procure through FS's Division of Information and Education. Only a few dozen copies are left!

Do mistakes pay?

You drive 500 miles over beautiful country and don't remember a thing—except a nasty detour for half a mile over a dirt road! That you remember. You send out perfectly typed error-free letters and no one pays any attention, but everyone knows that hunt-and-peck typed letters, full of errors and strike-over letters are highly personal, and they are well-read. Would it pay to make a couple of errors, or a couple of corrections in pen, at an important point in an important, perfectly typed letter? We just ask these questions; we can't answer them.

The man can write

If you think that example, rather than precept, would teach you to write good English, some time write to J. M. Eleazer, Extension Information Specialist, Clemson Agricultural College, Clemson, S. C., and ask for a sampling of the mimeographed releases he prepares. If you imagine that such releases for the rural press must be written in the tepid, musty, painfully involved language so often used, or in the written-down and pseudosimplified way that is an insult to intelligent farmers, study these examples of consummate art with care. Eleazer consistently writes clearly, pleasantly, intelligently, and rises not seldom to classic rural English in the best American tradition.

Men of distinction

The quest of the Forest Service for a photograph of "dignified men" ended in the law library last week with the discovery of a picture, taken in 1917, of William M. Williams who was USDA's Solicitor at that time, with his staff. It has been hanging in the library for many years. In asking to borrow the picture, the FS representative informed Wallace Jones, law librarian, that they needed a photograph of "dignified men" to embellish a court room scene in a film which is being made by that agency. Two men in the picture are still with the Solicitor's Office—Judge Lyman S. Hulbert, Farm Credit Division, and Edwin S. French of the Albuquerque side office.

Doc McClosky

Dr. William T. McClosky, internationally known authority on pharmacology and biochemistry, died recently aged 58, at his home in Washington, D. C., of which city he was a native. He received his medical degree from University of Maryland and his A. B. from George Washington, and joined Public Health Service in 1922, transferring to the USDA in 1929, as a pharmacologist in the Food and Drug Administration. Here he remained until 1944, when he returned to PHS though, of course, FDA had by then left the Department. Genial, rotund, he was best known for his work in the standardization of pituitrin, though he was experimenting with streptomycin and promine at the time of his death. A longtime sufferer from diabetes, he had a leg amputation to stay the disease a year or so ago, then purchased a special auto to enable him to continue his work. He was a national Catholic field commissioner in charge of organizing and directing the Catholic Boy Scouts of the Washington archdiocese. His death was caused by an embolism.

USDA: February 16, 1948

Gardner honored

K. B. Gardner, head of the Business Administration Section of the Cooperative Research and Service Division, Farm Credit Administration, received one of the 10 awards for service in bringing about closer relationships between urban and rural people at the annual business meeting of the American Institute of Cooperation. These awards, which covered work done in the last 3 years, included among the others Donald Nelson, Victor Emanuel, President of the Aviation Corporation and trustee of Cornell University, and William Blair, midwestern correspondent of the New York Times. Mr. Gardner's award arose out of his participation in a large number of clinics held by the American Institute of Cooperation in an effort to help farmer cooperatives improve their public relations accounting and educational programs.

Top chemists

Drs. K. S. Markley and Kyle Ward, of our Southern Regional Research Laboratory, have been designated as 2 of the 10 ablest chemists or chemical engineers in their fields in the U. S., the former in fats, oils, and soaps, and the latter in cellulose chemistry. The designation resulted from a reader poll conducted by Chemical Bulletin, a publication of the Chicago Section of the American Chemical Society. Incidentally, as many able chemists were found in Government as in academic work, according to this poll, while industry produced only half as many as either of the other two fields.

Land, men, credit

Leo E. Manion has done a brief paper-bound book for Island Press, 470 West 42, New York City 11, entitled "Land, Men, and Credit." He has worked in our farm credit system since he became appraiser with the Omaha Federal Land Bank shortly after it opened in 1917, and has since served it in many capacities in the field and in Washington. The book is in popular style.

In recent magazines

Marian Hugus, Human Nutrition and Home Economics, designed four belts pictured in "Waistline Wardrobe," Farm Journal, January, for the "I-can't-sew-but-oh-how-I-need-a-new-dress" department. February McCall's National Newsletter includes a number of items from USDA research agencies, and also points out the fact that girls in farm families get more schooling than the boys. Just the opposite holds in towns and cities. January House and Garden, in "Food Wasted Is Food for War," reminds us that Americans throw away 125,000,000 pounds of food a day; in "Food Equals Freedom" the continuing need for Freedom gardens is emphasized. Science News Letter, January 17, in "Better Farm Animals Bred," lists a considerable group of farm fowls and animals remodeled by USDA workers. Note also the bully cover boy with the "new look." Science Service, December 6, described the work of Dr. Esther Batchelder, HNHE, in helping the Germans save 120,000 tons of last year's crop of fruits and vegetables; for further details on this see USDA, January 19, 1948.

The sick pig

Pardon us for laughing right in your face, but if you have a flair for the humorous side of farming you should read E. B. White's "Death of a Pig" in the Atlantic Monthly for January.

New publications

Two 1948 publications that may be of interest to you are School Lunch Recipes Using Potatoes, prepared jointly by Bureau of Human Nutrition and Home Economics and Production and Marketing Administration, and Rat Control Methods, prepared by Fish and Wildlife Service, Department of the Interior, in cooperation with USDA.

Secretary's statements

You may be interested in Secretary Anderson's reply to Congressman Barrett on Range Management Proposals; it is dated January 14, and numbered 114. Also the Secretary's statement before the Senate Foreign Relations Committee regarding the European Recovery Program, made January 13, and numbered 77, may prove informative. Ask Press Service, USDA, for these.

Rural prepayment medical care

Your attention is directed to two informative items in the December 1947, American Journal of Public Health. One is an article entitled "Rural Prepayment Medical Care Plans and Public Health Agencies," by Mark Ziegler, M. D., Chief Medical Officer of Farmers Home Administration, and Drs. E. Richard Weirnerman and Milton I. Roemer, former FSA medical officers. Reprints can be obtained from Dr. Ziegler. See also the editorial beginning page 1592 of the same issue, same journal.

SCS in Sask

Wilkie Collins, Jr., Soil Conservation Service, Lincoln, Nebr., recently took a prominent part in the "Ag Reps Conference" held in Saskatoon, Saskatchewan. This is a meeting of Sask's 36 Agricultural Representatives, and Mr. Collins was a guest speaker. He termed the United States the world's champion soil waster and estimated that at least 25 percent of our soil has been so badly wind-damaged and water-eroded that it is on the way out of production. He believed Canadian farmers faced problems quite as serious as those of the United States.

Words

Do you think that when you protest a thing you are against it—or that a cadgy person is sharp and shrewd? If you do, get a good dictionary and hunt up the meanings of "protest" and "cadgy." While you are at it take a look at the definitions of "prone" (as in lie prone), "supine," and "prostrate," and see whether they really mean what you think they do.

Complicated atom

The atom is getting too complicated for us to understand any more. Back in 1932 the nucleus of the atom was regarded by physicists as a simple cluster of protons and electrons in perfect electric balance. This, with some electrons flying about in orbits and some distance away, comprised the atom. Then the neutron was discovered, and a place has to be found for it; next came the positron, then the mesons, which come in different kinds that vary in mass, but all of which are bigger than electrons yet smaller than protons. Mesons have from 240 to 900 times the mass of an electron. Now a French investigator has found a "meson-lambda" which, he says, has only three times the mass of an electron. What next? How much room is there in that atom anyway?

DDT again

Walter S. Fleming of the Bureau of Entomology and Plant Quarantine is author of a processed publication on the Effect on Plants of DDT Applied to Soil for the Destruction of Japanese Beetle Larvae. Hundreds of different plants were tested.

Decisions

Says a recent book, How to Get Things Done: "Quick decision is a matter of practice. Insist on doing it in unimportant matters. He who takes long in playing a card at bridge never develops keen judgment in business. Be snappy at cards, at tennis, and in minor matters. After a while you learn to speed up your important acts of reasoning."

Scooped 2,000 years ago

The word "Georgia" comes from the Greek and means "tiller of the soil", according to Ralph McGill of the Atlanta Constitution. McGill was crowing not long ago about how his State was using blue lupine to help diversify and rotate crops and build land at the same time. He guessed it had been so used for about 50 years. But a USDA specialist he was visiting directed his attention to Virgil's "Georgics" wherein, a hundred years before the birth of Christ, the classic poet and ruralist had recommended blue lupine, vetch, or Austrian peas, saying to the husbandman that he should sow his wheat "where before thou hadst reaped the pea with the wealth of rattling pods, or the tiny vetch crop, or the brittle stalks and rustling underwood of the bitter lupine."

Achievement

Farmers Home Administration tells the story of a 50-year-old Negro, Horace Gray of Luxora, Ark., who had been a sharecropper all his life, until small FSA and FHA loans had enabled him to purchase and enlarge a plot of land in fertile Mississippi County, steadily adding to his holdings until he had 80 acres, 75 of which were in cultivation. From this plot he and his family last year took in gross receipts of \$17,921.95, realizing a net profit of \$13,882. The Arkansas Press Association awarded him first place in its Live-At-Home competition, and the Arkansas Gazette ended an editorial on Gray's achievement by saying "The Government has rarely made a better investment," than in granting Gray his first small loan at a critical period, for which it was fully repaid.

Plant tumors et al.

Nature (London) for December 6, 1947 (p. 780), contains a good documented article on "Plant Tumours and Animal Cancer," by R. S. de Ropp of the New York Botanical Garden. The first bibliographical citation is the work by Erwin F. Smith when he reported with Townsend that crown-gall disease of plants was caused by a bacterium.

The remarkable soy

The Oregon Agricultural Experiment Station reports that quick-frozen pies and other pastries keep better in frozen storage if even a small quantity of soybean flour is used in the pastry mix! So has an antioxidantizing effect—so helps prevent rancidity when mixed with fat. Incidentally have you yet found the new pancake mix containing soybean flour? It makes lighter, fluffier, tastier griddle cakes. This is not hearsay. The editor is a top-notch griddle-cake cooker himself. He does not need to labor the high value of the soy from the standpoint of nutrition. Caught once, made up into canned succotash along with corn, soybeans also proved to be a new taste treat.

Jeliel Davidson

Dr. Davidson, long a cereal chemist in the USDA, died recently after only about two years in retirement, a retirement he always dreaded, as he said he wouldn't know what to do without his work. His research on the application of nitrates to wheat at heading time, which resulted in significant increases in the protein content of the grain, was most outstanding. He was an uncle of the famous sculptor, Jo Davidson, at whose insistence he underwent physical examination and hospitalization in New York City, where he passed away. A little rotund quiet man, a life-long bachelor, and a prodigious walker who scorned hat and overcoat in all weathers, he was greatly admired by his intimates. The editor knew him well years ago in the old Bureau of Chemistry.

Pear-waste stock feed

Conversion of the sugars in pear waste into feed yeast is a new process being explored cooperatively by the Western Regional Research Laboratory and the Olympia Canning Co. in Washington State. Normal factory accumulation of pear waste amounts to about 93,000 tons annually. A process has been developed for continuous fermentation of press juice from pear waste to produce feed yeast of high nutritional value, 60 pounds of dry yeast being secured from each ton of the wet pear waste. The present handicap to commercial operation is lack of a suitable continuous press for efficient separation of pear juice from the pomace, on which, however the Laboratory is at work. The Washington Agricultural Experiment Station is now completing a test of the product as a supplement in poultry feeding.

New book

Charles Scribner's Sons, New York, has recently published a book entitled "Fish Ponds for the Farm" (xii plus 114 pages, \$3.50) by Frank C. Edminister, of Soil Conservation Service. This book tells the story of fish ponds, ancient and modern, how to design and build them, and how to stock and manage them. It describes in detail the best location for the pond, the soil type and water supply needed, topography and drainage problems. It gives complete instructions for building and landscaping the pond, and then presents a thorough analysis of the problems of stocking and managing it for the maximum fish yield, the types of fish which may profitably be stocked and their characteristics, methods of preventing overstocking, food supply for the fish, how to take the fish harvest, and so on. Many Department workers may be interested in this volume.

Mails go through

A British correspondent recently wrote Dr. James F. Couch of our Eastern Regional Research Laboratory: "I am taking this opportunity of complimenting your Government service on its efficiency. My letter left here on December 11, 1947, addressed to Washington. After finding the right department in Philadelphia the reply left there December 19, only 8 days later."

Civil Service items

Today 92 percent of all jobs in the Executive Branch of the Government in continental United States are under the competitive system. This is the highest percentage in history. Sixty-five years ago the newly formed Civil Service Commission was just laying plans for the examination of all persons who desired to compete for appointment to vacancies that might occur after July 16, 1883, among the 14,000 positions then subject to the Civil Service Act; today there are 1,600,000 such jobs. Incidentally, the Nation-wide exam of stenographers and typists held August 25, 1947, to fill positions in the Washington area, brought 6,500 applications, 3,762 competitors, but only 1,529 eligibles, of whom but 302 were on the stenographer list—and practically all of these were already in Federal employment.

New office

Secretary's Memorandum 1204, January 27, created an Office for Food and Feed Conservation, of which Assistant Secretary Charles F. Brannan is acting Director. The new Office will formulate and carry out a program of disseminating information as to ways and means by which consumers, farmers, industrial users, and other handlers of food and feed may help alleviate shortages and assist in stabilizing prices.

The family

The National Conference on Family Life will be held in Washington, May 6 to 8. Several USDA and former USDA people are on its Technical Advisory Committee; it is backed by 112 organizations representing physicians, lawyers, businessmen, labor leaders, clergymen, housewives, teachers, social workers, journalists, students and others.

Home laundering

Did you think it cost nothing (but the work) to launder clothes at home? According to a study at the New York State (Cornell) Agricultural Experiment Station, it costs something like \$30-\$35 a year. For details on this study, address Ann Aikin at the Cornell Station, Ithaca, N. Y.

Orange sweetness

USDA's Paul L. Harding reports that mid-season Florida oranges are often sweeter than early varieties, because they tend to remain on the trees to maturity. Oranges, unlike apples and pears, do not ripen after picking. Harding judges the quality of an orange by the flesh texture, juiciness, sweetness, acidity, and vitamin and mineral content. Not one of these properties can be judged by the orange's outside appearance, the color, for instance, being no indication of composition—a wholly green orange may be mature, and vice versa for yellow skin color. Nor is size an index of ripeness. As oranges ripen, the juice volume and sugar content increase and acidity decreases, regardless of size. Smaller fruits contain more sugar, acid, and juice, *per standard packed box*, as well as more weight, than do the big fruits.

Psychology

If you are at all interested in psychology, look over Gardner Murphy's article, "Psychology Serving Society" in January Survey Graphic. Two books Murphy mentioned are still well worth reading by those interested in better work, management, or administrative habits, even though they have been out some time. They are: Remembering, by F. C. Bartlett of Cambridge University, which appeared in 1932, and Psychology of Social Norms by Muzafer Sherif, which appeared in 1936. Look them up in libraries. They will tell you much about the use and cultivation of memory, also about our emotionally loaded habits of perception which make us bring everything that we are into everything that we do.

1948 YEARBOOK

The 1948 Yearbook, entitled "Grass," which treats grasses and legumes in a big way, will probably be out in 3 or 4 months, or approximately 1 year following the 1947 book. The 1949 Yearbook will treat trees and forestry most comprehensively and, it is anticipated, will be titled simply "Trees."

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FOR MARCH 1, 1948

Marshall Plan and the farm Foot-and-Mouth Info Job

SPEAKING ON the subject "In League With the Future," on January 26, at Trenton, N. J., Secretary Anderson remarked how bad weather had drastically reduced crop yields in earlier days. Thus the Corn Belt weather of 1947 would probably have brought disastrous crop failure 20 years ago. "But last year, because farmers had hybrid seed, which is hardier, more resistant and can be planted later, and because they have machines which enable them to put in a crop almost at a moment's notice, a probable disastrous situation" was averted.

Today, also, price programs protect farmers from nickel cotton, 25-cent corn, and 10-cent eggs. Today soil conservation has proceeded far enough to prevent the ruin of millions of acres and to build up millions more. Today an hour of labor on the farm produces one-third more milk, one-half more corn, and more than twice as much wheat as in 1920. Agriculture as a whole is producing one-third more than in prewar times, with fewer farms and a smaller labor force. Potato "yields have risen far beyond expectations. New Jersey last year had an average yield of almost 220 bushels per acre, compared with an average of 170 bushels over the period 1936-45. In California last year one operator on a 40-acre plot—commercially treated, not 'babied'—got 1,188 bushels per acre."

Mr. Anderson then made suggestions for dealing wisely with abundance. He discussed agriculture in New Jersey. He said also: "Not only will the Marshall Plan make friends and customers for the products of American agriculture when the economy of Europe has been restored, it will also give farmers a few years of grace to adjust their operations to permanent, profitable peacetime operation." Press Service has a summary of the talk; it is No. 196.

DALLAS BURCH of the Bureau of Animal Industry . . . just back from 7 weeks in Mexico . . . says:

"It is already common knowledge that technical skill, equipment, and money are inadequate to eradicate foot-and-mouth disease in Mexico unless the campaign has the support of a substantial majority of the people." Early press reaction was favorable. But he points out that, "After the newness of the campaign wore off, the publicizing of equipment, indemnity payments, slaughter data, and related developments lost their flavor, especially in the absence of reports of real progress against the disease. More disquieting still were reports from the field that large segments of the rural population were still uninformed about the disease and its danger to Mexican agriculture and industry."

In July the Joint Commission on Foot-and-Mouth expanded the information program. Since many of the country people can't read or write, it sent trucks with speakers, record players, and public address systems to spots where there was evidence of misunderstanding and opposition. About 100 transcriptions were sent to Mexican radio stations. In August, the information program was expanded further. State, town, and rural committees were set up. Personal contacts through these committees have a powerful influence.

Dallas observes that experience with eradication of tick fever, bovine tuberculosis, and other diseases in the U. S. has demonstrated the great value of motion pictures in enlisting public support. The Mexican picture "La Aftosa" (the Mexican term for foot-and-mouth disease) has been widely shown in Mexico. Burch thinks a more intensive motion-picture program, including types of pictures that make their points dramatically so as to be remembered, would be extremely helpful. In fact, Dallas concludes that U. S. experience has shown that difficult veterinary field operations make their best progress only when preceded by intensive information programs.

Forestry in France

DURING A PANEL discussion a while back, E. I. Kotok, Assistant Chief of Forest Service, made some interesting factual observations about forestry in France, based on his own visits there. The total area of France is 136 million acres, which makes it 1 1/3 times the size of California, both of which have 20 percent of their land area in commercial timber stands, i. e., 26.4 million acres in France and 20 in California. But France produces about 4 billion board feet of commercial forest products annually, and uses some 8 billion board feet for fuel wood; California produces only about 2.7 billion board feet. For comparison, Oregon produces 6 and Washington 3 billion board feet.

Roughly 70 percent of the French forest types are hardwoods, whereas about 80 percent of the California trees are conifers. In France, the State owns about 14 percent of the forest land, the communes 24 percent, and the remainder is privately owned. There are 1.4 million private owners with average holdings of 25 acres of forest land. But France, with well-managed forests, produces about 350 board feet of timber per acre per year and hopes, with good reason, soon to up this 50 percent, whereas the over-all annual growth in California forests is probably less than 50 board feet per acre per year—despite the fact that current cuttings come heavily from the stored-up wealth of virgin forests!

In the prewar period the per capita lumber consumption of France was 50 board feet per year, of the U. S. 190, and of California 220 board feet. For 1948-52 France expects to average 80 and we 300 board feet, but our lumber need largely reflects our intensive industrialization and large agricultural shipments. For instance, California agriculturists use approximately a billion board feet annually to package, handle, and ship their products.

Especially interesting in France are the measures that have been taken to protect the upstream watershed, particularly in the Savoie region, where forest protection is very strictly regulated. Finally, the reclamation project in the Landes region has converted 1.5 million acres—once sand dunes and marshes—to a splendid industry based on maritime pine, for lumber and naval stores.

Honor Arbour

Progressive Farmer made Marjorie Arbour of Louisiana Extension Service its "agricultural woman of the year" for her original method of journalism teaching. Amen to that!

Buying out Uncle Sam

THE NATION'S cooperating farmers are continuing the job of getting complete ownership of their own credit machinery. In 1947, I. W. Duggan, Governor of Farm Credit Administration, announced that the last of the 12 Federal Land Banks had repaid all Government-advanced capital. Thus, these long-term, low-cost, mortgage-credit banks, and the National Farm Loan Associations which make land bank loans available at the local level, became entirely the property of the farmers and ranchers who obtain their mortgage credit through them.

During 1947 there was another significant development too in the cooperative farm credit field. During this year the last of an even dozen of the Production Credit Associations, local co-ops which land money obtained through the machinery of the 12 Federal Intermediate Credit Banks, announced the retirement of all Government-owned stock. By early January 1948, 19 more PCA's had retired the stock owned by the Government, making a total of 31 now entirely farmer-owned. Altogether there are 504 Production Credit Associations serving farmers and ranchers in every part of the Nation.

Of these, in addition to the 31 that have paid out, the farmer-rancher members of 106 more, now own more than 75 percent of their capital stock, and so may be said to be within shooting distance of completely owning the cooperatives that supply their agricultural short-term credit. Averaging the entire group—the 31 associations which have paid out, the 106 that are more than 75 percent along the road to complete member-ownership, and the remaining 367—the cooperative production credit system is more than half-way toward the goal achieved last year by the members of the Federal land bank system.

Strawberries

Several workers at Plant Industry Station, Beltsville, Md., have made an interesting report on the ascorbic acid (or vitamin C) content of strawberries. They are Boyce D. Ezell, Geo. M. Darrow, Marguerite S. Wilcox, and D. H. Scott. They found that shade-grown strawberries contained considerably less ascorbic acid than those exposed to normal sunlight—the values of the latter being from 34 to 61 percent greater; that half-red berries held for 1 or for 2 days, until fully ripe, increased somewhat in ascorbic content, but not so much as berries ripened on the plant; that Marshall, Catskill, Fair-peak, and Robinson were important varieties rich in ascorbic acid; and that the average ascorbic acid content of U. S. strawberries—60 milligrams per 100 grams—could probably be raised to 80 milligrams or more by breeding methods.

"Freedom Gardens" of 1948

EUROPEAN RECOVERY keynotes this year's National Garden Program. Secretary Anderson, in calling for 20,000,000 "Freedom Gardens" in 1948, said that the Nation's backyard farmers, by adding their produce to the national food supply, can make a real contribution to the European Recovery Program. Not that home gardeners will be asked to grow wheat and other grains needed for foreign relief. But they can accomplish the same thing by producing foods which aid in balancing our diets at home, and thus take the pressure of demand off grains and other foods needed overseas.

This year's National Garden Program again will be headed by Paul C. Stark, and will be handled much the same as last year's program and the Victory Garden programs of the war period. USDA, with the cooperation of national garden clubs and other organizations, will spearhead the program, with local garden clubs, schools, civic organizations, and other groups carrying the ball at the community level. The Extension Services at national, State, and county levels will help with the organizational work, and will provide the necessary "how-to-do-it" information.

While the urgencies of the world food situation furnish the central theme for the 1948 garden program, other established objectives of gardening will not be overlooked. These include the long-range objectives of improving the health and nutritional standards of our people through the activity of gardening, increased consumption of fruits and vegetables, and the improvement and beautification of home grounds and community surroundings. USDAers are urged to dust the rust off their garden tools and get into harness, come Spring.

Ghost story

The best ghost story we have heard recently came from a distant relative of Les Schlup, Extension Service—a son who lives away from home. Seems Les Jr.'s ghost-writing bureau was called upon to do a speech for—well, let us say a prominent criminologist named Behindbars, who was to deliver it before a big police and crime convention in Seattle. Les Jr. got the job and turned in a bang-up speech, but the next year the same association met in Chicago and Les Jr. was called upon to do a speech on criminology for a police chief we'll call Clubb. So he decided to talk to a few experts before writing the speech and one of them, to his astonishment and mute chagrin, suddenly looked in his files and drew forth an address which he said was extraordinarily good—the last word—it had been delivered by Behindbars at Seattle—he said Les Jr. couldn't do better than consult it before writing the speech for Clubb! The genetic moral of this tale is, like father like son, or one good writer begets another.

Brief but important

Sweet music

The Secretary delivered an address entitled "There's Music in the Air," before the Southwide Farmers' Conference, Tuskegee Institute, on January 21. Those who would like to read the speech entire may get it by asking Press Service, USDA, for No. 168.

Sustained yield unit

The first sustained yield unit composed entirely of publicly owned forest land in the U. S. was formally established January 22, in New Mexico's Carson National Forest. It covers 73,600 acres and will be called the Vallecitos Federal Sustained Yield Unit. It was set up under the Sustained Yield Unit Act of March 29, 1944, following a public hearing at Vallecitos. The plan is to assure an increased and sustained supply of national forest timber for manufacture in the area. Local sawmills will rebuild to handle the timber, and employment opportunities should increase 400 percent in area woods and mill work. Under this management plan timber should be cut at an annual rate of 1.5 million board feet and, for the first 30 years, will be confined to the virgin stands.

Delaware news

George L. Shuster has now assumed full-time academic duties as Dean of University of Delaware's School of Agriculture; and George M. Worrillow has become Director of both the experiment station and extension. Dean Shuster has held all three exacting positions since 1939. Director Worrillow has been associated with the university for two decades in various capacities in extension work, but also has closely followed the work of the experiment station.

Before and after

Missouri's Extension Circular 544, on Producing and Marketing Quality Eggs, offers a good example of how editors and specialists, working amicably together, can render a publication more readable and more interesting. We have copies of the original manuscript and of the finished bulletin. This "before and after" material came in through the courtesy of Harry Mileham, Federal Extension Service. If you want to see and study this exhibit *write*, please do not phone. T. Swann Harding, Office of Information, USDA, Washington 25, D. C.

Trace elements

A concise digest of the discussion at the Symposium on Trace Elements in Plant Physiology, which was held November 5-7 last, at Rothamsted Experimental Station, Harpenden, England, under the auspices of the International Union of Biological Sciences, will be found in Science for January 30, page 108.

Science in government

The editor of USDA has some reprints of his article on The Place of Science in Democratic Government, which appeared in December 1947, American Sociological Review. *Write*, please do not phone. T. Swann Harding, Office of Information, USDA, Washington 25, D. C.

Brucellosis

The Committee on the Public Health Aspects of Brucellosis, of which Carl F. Mingle and B. T. Simms of our Bureau of Animal Industry are members, met recently at the National Academy of Sciences Building in Washington. A digest of the proceedings will be found in Science for January 30, page 110.

Science notations

Wendell M. Stanley, 1946 Nobel Prize winner, will soon take charge of University of California's Virus Laboratory, the first such university center in the world. But University of Illinois Graduate College has established a Photosynthesis Project in the Department of Botany, under Robert Emerson.

Our boys

Robert L. Pendleton, of Office of Foreign Agricultural Relations, left a short while back with a commission of Food and Agriculture Organization which will study improvement of agriculture in Siam. A. C. Hull Jr. and Joseph F. Pechanec, forest ecologists at our Intermountain Forest and Range Experiment Station, Ogden, Utah, won a \$100 prize for the excellence, readability, timeliness, and importance of their article on cheatgrass in the August 1947, Journal of Forestry.

Earl Clarke, Intern

Earl W. Clarke, Farm Credit Administration, was one of 29 employees of Government recently selected by Civil Service Commission for training as Administrative Intern. His selection was based on scholarship, work experience, and personal qualities, and it followed stiff written and oral examinations. Beginning on February 9, Earl undertook something more than 5 months of rotating work assignments and after-hour study under supervision of an interdepartmental committee.

Routing the rot

Scientists at our Southern Regional Research Laboratory have found that cotton fabrics and yarn can be protected from mildew and other forms of rot by chemically converting part of the fiber to cellulose acetate—similar to acetate rayon. No other rotproofing treatment imparts such resistance, and this one neither discolors nor otherwise degrades the cotton. The partial acetylation process is already finding commercial use. For details procure No. 247 by writing Press Service, USDA, Washington 25, D. C.

Boozy bossy

The other day we sent to Bureau of Dairy Industry an editorial from the New York Herald Tribune which implied that a certain British cow had yielded milk in unusually large quantities because she drank half a gallon of stout daily. This reminded the editorial writer that a New Jersey farmer had claimed that his cow gave cocktails when he fed her gin. The BDI austere replied: "We do not give cows alcohol, but we do take alcohol out of their milk." More specifically they had in mind the method, already announced in *USDA*, by which lactose or milk sugar in whey is fermented to ethyl alcohol for industrial use. We say three cheers for BDI, which developed this process, and high regards also for their temperate views on the feeding of cows.

National Forests receipts

Net receipts from the operation of the 153 National Forests for the 6-month period, July 1 to December 31, 1947, the first half of fiscal year 1948, totaled \$11,223,308. These receipts exceeded those for the corresponding period in 1946, by \$2,917,893, and were the largest ever earned by the National Forests in any 6-month period. More than 90 percent of the receipts came from the sale of timber. Receipts from the operation of National Forests are paid into the Treasury. With some minor authorized exceptions, 25 percent of them are returned each year to the States to be used for roads and schools in the counties with national forest land within them. In addition another 10 percent of the net receipts is apportioned to the National Forests for building and maintaining forest roads and trails.

USDA: March 1, 1948

Scientists in a fog

Some of our researchers appear to be so anxious to work in a fog that they conjure up an artificial one if no natural one exists. Seriously, our plant industry research men at Tifton, Ga., find that certain grasses can be far better hybridized on moist than on dry days, so they create their own foggy weather, using an adaptation of an automatic humidifier. The male and female flower parts of most grasses are small and are packed together closely and tightly, so that it would take a microjeweler to do a good job of hybridization, especially on dry days, when it is easy to tear the delicate flowering parts and the pollen blows about. Hence the fog technique.

Industrial worker meals

During the war Production and Marketing Administration worked extensively in promoting restaurant and cafeteria service for industrial workers in their own plants. Their activities in this field were suspended in May 1947. But you can find out what they did in the PMA annual report just issued.

Cows coat cans

Actually they don't, but it sounds catchy. Some years ago Bureau of Dairy Industry announced that an enamel made from milk itself—more specifically from lactic acid made from milk sugar—could be used to coat milk cans and prevent their rusting, while making them easier to clean and sterilize. Four patents have been issued on the process; others are pending. Get more details from BDI information.

11th President of UNH

Dr. Arthur Stanton Adams, provost of Cornell University, has been elected eleventh President of the University of New Hampshire to succeed Dr. Harold W. Stoke who resigned, last August, to become President of the Louisiana State University. Dr. Adams is a native of Winchester, Mass., and a graduate of the U. S. Naval Academy. He was at the Colorado School of Mines before joining the Cornell faculty.

Penn State science

It is Penn State's Dr. H. K. Schilling who, during the war, developed the inaudible siren for the Army Signal Corps. It is capable of killing mosquitoes in a few seconds, laboratory mice in a minute, and also of sterilizing food, homogenizing milk, increasing seed fertility, and perhaps of accelerating wound healing. Then also, Penn State's Henry L. Yeagley has discovered that homing pigeons return "home" for the compelling reason that home has a specific magnetic attraction for them. Blind and with hearing blocked off, they still high-tail it for home because magnetic attraction acts upon muscles which extend inward from their eyes. If a magnetized bit of metal is attached to one wing the pigeon becomes hopelessly confused, however, and gets lost. But if released near another area with the same magnetic properties of "home," they go there instead!

Erosion

Prof. Chas. L. Camp of University of California has unearthed evidence recently that a severe period of soil erosion occurred in South Africa just prior to the Middle Stone Age, say 50,000 years ago. Nature, however, did something about this by soon making a secondary deposit thereabouts which curbed the erosion. But we cannot always depend upon nature to do this sort of thing, which is why we have found it profitable 50,000 years later to have a Soil Conservation Service and an Agricultural Conservation Program.

Handled with care

In experimenting with radioactive chemicals from the atomic piles at Oak Ridge, USDA plant scientists can no longer use the familiar clay pots and jars in their greenhouse experiments. Instead they must use inexpensive enamel-coated tin cans. After each experiment they discard the cans and soil that contains the radioactive material and bury them deep in the ground to get rid of them. The reason is simple. In checking the action of the radioactive chemicals moving from the soil into and through the plant, the scientists use delicate "tracer" atoms; counting instruments detect and record the passage of these as they pass through the plant tissues. The radiant energy present at the start of the experiment must be known precisely. Hence fresh soil, a new container, and exactly measured quantities of radioactive chemicals are used. Previously used clay containers would have become at least slightly radioactive, and so would add some unmeasured radioactive energy that would complicate the experiment.

Facsimile of Constitution

What is said to be the first reduced-size facsimile in legible form of the U. S. Constitution has been published by Norman T. A. Munder of Baltimore, in an attractive booklet which also contains the text of the Bill of Rights and historical notes by the Chief, Division of Manuscripts, Library of Congress. If you'd like to get a copy, Mrs. Madeline Baker of the Forest Service, Room 3216 South Building, has a supply available at 50 cents each. Field workers write in.

Live USDA Club

James A. Kime of our Southern Regional Research Laboratory, recently sent us a program of the joint annual meeting of the USDA Club and NODA Credit Union of New Orleans, January 22, a detailed report of the Credit Union's activities, and newspaper clippings on the result of the officer elections of the two organizations. The phenomenal growth of the Credit Union during the past year is worthy of note, while the USDA Club is about as alive as any in the Nation. Such highly successful results here should stimulate other USDA workers in other localities to far greater effort. The meeting was a well-planned affair, over 300 attended and paid a quarter each for refreshments—yet another proof that well-planned meetings get results.

Our loss

Granville E. Dickey, information specialist with Production and Marketing Administration since 1944, and formerly with War Food Administration, Civilian Conservation Corps staff, and a New York advertising agency, died suddenly last month. Mr. Dickey specialized in sugar and tobacco information. He studied at Geo. Washington and Northwestern Universities.

World-wide farm cooperation

With President Truman's signature of the Smith-Mundt bill, plans are taking shape to extend to other parts of the world the type of agricultural cooperation we've had with Latin American countries the past few years. These include potential operating agreements with foreign Governments to set up agricultural stations, and assign U. S. experts to advise foreign officials on agricultural matters. This new program will help implement the recommendations of our technical missions to the Middle East, China, the Philippines, and other countries. Future plans include cooperation in an East-West belt, including the Mediterranean Basin, the Arabic countries and Liberia, southern Asia, China, the Philippine Islands, and the non-self-governing islands of the South Pacific. The new act will also extend the program for exchange of agricultural trainees and other personnel.

The simple days

Not long since a little 16-page pamphlet about as big as a billfold turned up when workmen dug out from under the floor of an old building in Alamogordo, N. Mex. It is called "Government Forest Work" and was published by the Forest Service in 1916. Among the statistics is recorded the fact that FS employees numbered 3,875 of whom 3,275 "were employed upon the National Forests as supervisors, deputy supervisors, rangers, guards, etc." Receipts for 1915 were \$2,481,469.35, and had been steadily rising since 1912, the earliest year shown. About a million and a quarter acres of land had been approved for purchase under the Weeks Law.

New editor

Kenneth E. Huddleston is the new editor of National County Agent and Vo-Ag Teacher, published at Philadelphia. He is a native Kentuckian who grew tobacco on the home farm. He was publisher of a newspaper in Kentucky and was on the Kentucky University staff awhile prior to joining AAA and SCS information work, where he served 5 years.

News on frozen peas

Green peas are the most popular of all frozen as of all canned vegetables, but they sometimes have an off-flavor which has been of concern to packers and retailers as well as to the housewife. To learn the cause of this, scientists of our Western Regional Research Laboratory checked every step of the process from harvesting in the field through freezing and storage, and found that most of the trouble came from the delay between vining and shelling in the field and freezing at the plant. The longer the peas wait after they are harvested and removed from the pods, the more pronounced is the off-flavor which they develop. Leaving the peas in the pod until just before blanching helps considerably in preventing the trouble. But the solution of the problem appears to be new machines and methods of harvesting which will get the peas to the plant very rapidly.

Murder!

A new so-called "phase microscope" has been developed through which it is possible actually to see a virus killing a cell. Living bacterial cells from root nodules of peas were used as the victims and a soil virus as the murderer. Dr. Alvin W. Hofer of New York (Geneva) Agricultural Experiment Station assisted in the demonstration. The use of this microscope makes cells visible without staining; the stains killed the cells and rendered it impossible for the scientist to see how things went with them alive.

Selig Hecht

Dr. Hecht, the brilliant and distinguished professor of biophysics at Columbia, who died suddenly last September at the age of 55, was a USDA pharmacologist in 1913-14. His obituary will be found in Science for January 30, page 105.

FHA limits nutrition program

The nutrition services offered by the Farmers Home Administration have been limited by the discontinuance of county home management supervisors who worked directly with individual borrower families in their homes on such problems as food conservation, nutrition, health, and family-living budgets. However, 60 home economists have been retained in 26 of the State offices, which serve 29 States. The number ranges from 1 State home management supervisor in each of 11 State offices, where the caseload is smaller, to 4 or 5 in a few of the larger caseload States in the South.

Alan Leighton

Alan Leighton, whose Bureau of Dalry Industry project had to be discontinued last year for lack of funds, died recently at 57, by his own hand. He had been suffering from nervous indisposition for some years. A native of New Hampshire, he graduated from the university of that State and later attended Cornell. He was for years a civic leader in his home town, Cottage City, Md., and was even more widely known for riding his bicycle some 8 or 10 miles to work, clear through the city of Washington, every day regardless of the weather. He had been with BDI for 27 years; before that he was in the Bureau of Mines.

Synthetic riboflavin

Cheaper riboflavin (vitamin B-2) production seems likely through a process being developed at our Northern Regional Research Laboratory, Peoria, Ill. This vitamin is very frequently lacking in American diets. About \$6 worth of riboflavin can be produced at a cost of about 15 cents by using a cotton disease organism which has been found to grow on a mixture of corn sugar and animal stick liquor (a packing house byproduct), and which makes riboflavin as its byproduct.

Loss of a leader

In the passing of Dr. Roy Green, head of Colorado A. & M. on January 22, all farm leaders mourn the loss of a most tireless and devoted worker. Here in USDA one of his outstanding pioneer efforts was his studies in wheat crop insurance; later on he became deputy governor of Farm Credit Administration. He also headed agricultural finance in Bureau of Agricultural Economics and was Manager of Federal Crop Insurance Corporation before going to Colorado.

Andrews goes to Germany

Stanley Andrews, who served on Secretary Anderson's staff in matters concerned with food production in our zone of occupation in Germany, has been named Chief of the Food and Agriculture Branch of the United States Military Government in Germany. His headquarters will be in Berlin. Mr. Andrews is well known. When he left USDA last fall, he returned to the Arkansas Democrat and Arkansas Farmer. The Democrat, in its issue of January 11, carried a story by him featuring home demonstration work. The story was based on the life and work of Marcelle Phillips, who had been home demonstration agent in Logan County, Ark., for 29 years.

In Colombia

The article on Agricultural Education in Colombia, by Dr. W. H. Hodge, associate professor of botany at University of Massachusetts, which appeared in February Scientific Monthly, may prove of interest to you. For one thing, the agricultural college discussed by Dr. Hodge has to do the best it can with freshman classes largely composed of applicants who have been turned down at schools of medicine, law, and mining, which they much prefer to agriculture. Hence, they study agriculture mainly because they can't study anything else, which tends to make classes listless and dull. But read the article. It holds lots more of interest than that.

Internists make good

Not long since an administrative analyst at the Bureau of the Budget wrote Farmers Home Administration about the excellent work done by its internist there—Paul Huber—who was found to be an agreeable, hard-working, and capable accountant, with an excellent knowledge of cost accounting. Huber was assisting in motor equipment management projects. James R. Johnson of FHA is among those recently selected from this agency for a similar internship.

"Required reading"

A New York Herald Tribune editorial for February 5 said: "There is, we think, no better required reading each year for every American than the annual report of the U. S. Forest Service," and then proceeded to show why. You may want to hunt up the report and read it yourself. Land, water, and forests are fundamental and they all tie together. Chief Forester Lyle F. Watts' annual report lucidly and readably makes all this clear, and much more.

Harry Schooler

Harry Schooler, 54, former director of AAA's North Central Region, died at Minneapolis, February 2. He was a graduate of South Dakota State College and a veteran of World War I. After the war he owned and operated a ranch in Meade County, S. Dak., and was named to the State AAA Committee in the early days of the program. Later he became State Chairman, Assistant Director of the North Central Region, and then Director, succeeding Claude R. Wickard, when the latter became Secretary of Agriculture.

Hulbert honored

Lyman S. Hulbert, Office of the Solicitor, was honored recently by the University of Wisconsin as having contributed generously to the development of better agricultural thought and the improvement of rural living. Mr. Hulbert entered Sol., December 1, 1917, transferred to Bureau of Agricultural Economics in 1920, was with the Federal Farm Board and Farm Credit Administration from 1929 until 1940, and now performs legal work pertaining to the Central Bank of Cooperatives, the 12 regional banks for co-ops, and FCA's Division of Cooperative Research and Service. His "Legal Phases of Cooperative Associations" (FCA Bulletin 50) serves as a sort of Bible for colleges, co-op attorneys, and others. He also helped draft the Cooperative Marketing Act, the Agricultural Marketing Act, the Perishable Commodities Act, and other legislation, and issues a quarterly report covering court cases and rulings affecting agricultural associations.

RETIREMENT

Passage of a new Federal employee retirement act seems imminent as these lines are written. As soon as they can arrange to do so your own agency personnel offices will inform you about the new law; you should address your questions to them. As soon as possible also USDA will announce an abstract of the new law's provisions so that you can write in and get it. Meanwhile the boys who conduct Federal Government news columns on the Washington newspapers will begin to distribute a Civil Service booklet on the new law immediately it is signed by the President. To get that address the Washington Post, Evening Star, Daily News, or Times-Herald by postal and ask that a copy of this pamphlet be sent you when it becomes available. Please write, do not phone—but just a postal.

MARCH 1, 1948

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USDA

FOR MARCH 15, 1948

Superior accomplishments

THE FOLLOWING employees have been awarded pay increases for superior accomplishment:

Animal Industry: ADA L. SMITH, Technical Editor, for rendering services beyond her usual capable editorial work by analyzing voluminous complex data contained in manuscripts and making concrete recommendations to research workers on the best means of presenting data for publication. Also for reviewing technical manuscripts for outside publications and handling special problems involving official relationships with other Government, State, and private research agencies with unusually good judgment and tact. CHARLES J. COON, Veterinary Meat Inspector, for preparing an extensive collection of pathological and parasitological material for exhibition purposes in addition to performing his usual duties. This exhibit serves to acquaint stockmen with the importance of disease and parasites in the economy of livestock production and reflects great credit on the work of the Department in eliminating from channels of trade meat that is diseased. Use of this exhibit has been requested by various State colleges, State fairs and shows, in South Dakota and Minnesota.

Forest Service: HENRY ZINGG, Laboratory Aid, for undertaking the translation from German of numerous highly technical articles on wood technology, done without knowledge of his superiors and on his own time. Several of the translated articles are now on file in the Forest Products Laboratory Branch of the Department Library. HAZEL J. BURSEY, Clerk, for reassigning work loads to three other lower grade clerks and to herself in the absence of her supervisor in such manner that the work of the office was maintained at its high standard without undue strain, the highest morale of employees maintained during the increased workload, and her own work performance merited more than an Excellent efficiency rating during this period. RALPH E. CARRIER, Cadastral Engineer, for displaying unusual skill and ingenuity in searching out information on land boundaries and corners by study of public and private records and by interview of local residents in order to direct the survey of approximately 40,000 acres of land. WILLIAM W. BERGOFFEN, Information Specialist, for outstanding work in connection with the authorship and production of the "Bill Scott—Forest Ranger" forest conservation radio series, a comprehensive forestry educational project for use in conjunction with school-cooperation activities. Mr. Bergoffen also assisted the Radio Workshop of the New York City Board of Education with the auditioning of talent, rehearsals, guest interviews and administrative details. CHARLES W. MATTISON, Educational Advisor, for outstanding work in connection with the initiation and promotion of the "Bill Scott—Forest Ranger" radio series. Mr. Mattison conceived the idea, made the initial contacts for broadcasts and promoted its use with the U. S. Office of Education and various school systems. Favorable response has been Nationwide. JOHN MORGAN SMITH, Jr., Forest Ranger, for outstanding public relations work in the development of the Snow King Valley Winter Sports Area on the Arapaho National Forest. Also for outstanding achievement in the organization of the Annual Grand County Fire Meetings to stimulate interest in prevention of range and forest fires. MANFORD R. HICKEL, Forest Ranger, for aggressively tackling the job of eliminating overgrazing and investigating and prosecuting flagrant trespassers on his district. Mr. Hickel has succeeded in winning public support of his good management and enforcement of regulations in a fair, businesslike manner.

Food and feed drive

ASSISTANT SECRETARY Brannan is the Department's No. 1 conservationist—this time in food and feed. Mr. Brannan's newest duty is the direction of the new staff Office for Food and Feed Conservation. The OFFC program, charted in the Anti-Inflation Act (Public Law 395—80th Congress), picks up where the Citizen's Food Committee left off. From them, OFFC inherits the tough jobs of easing food shortages, stabilizing prices, and assuring food supplies for overseas shipments.

To carry out its job, OFFC will conduct a far-flung informational program mobilizing consumers, farmers, industrial users, and other food and feed handlers for all-out conservation. Besides a general attack on food waste of any kind, OFFC will support measures that (1) encourage more efficient use, care, and preservation of food and feed; (2) reduce waste in food and feed; and (3) control and eradicate insects and rodents. The program likewise will endeavor to reduce the consumption of foods and feeds in short supply and foster the consumption of more abundant items.

Another important OFFC function is to obtain, through Production and Marketing Administration commodity branches and other USDA agencies, voluntary agreements with industries to conserve commodities in short supply. Already, under this phase of the program, meetings have been held with distillers, brewers, bakers, wet and dry corn millers, and other users of grain.

Aiding Mr. Brannan in carrying on this work is Don Lehman, former Chief of the Department's Press Service, who returned from duty as associate editor of two national magazines to become Deputy Director of OFFC. The work of OFFC's three main divisions is in charge of Virgil Hassler, Consumers Activities;

Research budget

DURING FISCAL year 1947 the Federal Government spent 625 million dollars for research. Of this a cool half billion or 80 percent went for military research; \$31,328,000, or 5 percent, went for agricultural research. In addition to the Federal Government research, industry spent approximately 450 millions, and universities and endowed institutions about 100 millions on research.

During fiscal year 1948, the USDA will spend about 37½ million dollars on research itself and will administer research grants of 9½ millions, which have been made by the Federal Government to the States. Of this total of 47 million dollars, 9 millions are funds appropriated under the Research and Marketing Act of 1946.

According to last year's estimates, the States contributed a little less than \$4 for experiment station research for each dollar contributed by the Federal Government. On that basis, the estimated total to be spent this year by the States is about 50 million dollars. If we add that to the 37½ millions being spent by the Department itself, we get between 85 and 90 million dollars as the total Federal-State expenditures for agricultural research during fiscal year 1948.

The USDA carries on research at about 200 locations in the U. S. and foreign countries. As of December 1947, there were about 2,500 active projects, on which 3,200 scientists were at work. The States have something over 7,700 projects, including both State and Federal-grant funds.

H. K. Baker, Industry Activities; and Kenneth Olson, Farm Activities. Day Monroe, formerly of Bureau of Human Nutrition and Home Economics, heads a staff producing radio and newspaper material for homemakers.

Production and Marketing Administration: MARGARET M. COX, Fiscal Accounting Clerk, for devising a form and method for analyzing expenditures, unliquidated obligations and available funds. This procedure has been officially adopted to provide such financial analyses to all branches of the Administration. **EDWARD C. KELLETT**, Accounting Clerk, for developing the idea of a simplified and streamlined handling of requisitions for supplies from the Bureau of Federal Supply which has saved many hours of reconciliation work, has made available for other purposes funds obligated to cover back orders, and has reduced the possibility of duplicate shipments.

Soil Conservation Service: ROY E. SCHELL, Photographer, in recognition of his leadership and organization abilities in increasing production of his unit during a period of exceptionally heavy work load and above normal personnel turnover. Mr. Schell has exhibited unusual interest in his work by taking outside college courses on new developments in topography, especially lithography and color photography. **LINDO J. BARTELLI**, Soil Conservationist, for his outstanding contribution to the soil mapping program in Michigan by mapping 35 percent more acres than any other soil scientist in the State, which completed a large backlog of mapping. Also for conducting a complete series of group planning meetings. **PERRY R. CARROLL**, Soil Conservationist, for doing an outstanding job in organizing and developing five watershed associations which are now holding regular monthly business and educational meetings to facilitate self-help through development of a cooperative interest in adopting conservation farm practices.

Office of the Secretary, Office of Personnel: DORA E. OLIVER, Procedure Analyst, for performing her assigned duties in an outstanding manner so as to be recognized as an authority in the Department on personnel policies and regulations, Civil Service circulars, Comptroller General decisions and other related regulations, while carrying a workload far in excess of that expected of an Excellent employee. In addition, for accepting responsibility for intricate, complex statistical reports required by the Department which involve a high degree of accuracy and an extensive background of knowledge. Mrs. Oliver has always met established deadlines through diligent application of effort and expenditure of her own time and has produced, on extremely short notice, creditable reports and analyses used by the Secretary and others.

Remember, these descriptions of accomplishments are greatly summarized because of space limitations.

Servicing the Negro press

THE OTHER day we asked Sherman Briscoe, who has been channeling USDA information through the Negro press to rural and urban colored people since 1941, to tell how he does his job. In brief, here's what he said:

"Today, there are 690,000 colored farmers, residing mainly in the South, a 30-percent decline since 1920. These farmers operate 40 million acres, of which they own 16 million. Roughly, a third of them subscribe to local weekly or daily papers. About 1 out of every 6 of them supplements his reading by subscribing to a Negro publication.

"In preparing agricultural informa-

tion for the Negro press two sets of factors must be considered. The first relates to Negro farm people and their over-all attitude toward farming; the second to the nature, perspective, and general character of the Negro press. The Negro's experience in American agriculture, beginning in Jamestown some 340 years ago, has been largely unpleasant. Hence many colored farmers—especially tenants and croppers—look to the day when they can shake the farm mud off their heels. A large sector of the Negro press—171 bona fide publications—has a similar point of view.

"Essentially, the Negro press is a supplementary and a protest press. It came into being 120 years ago to help bolster the Abolitionist movement. It has remained to protest acts of injustice, or the alleged unfair treatment of Negroes and other minorities, and help create a feeling of dignity and self-respect among Negroes. Therefore, the Negro press frequently emblazons in headlines conflicts arising on farms in the South as a result of ruptured landlord-tenant relations. Such stories are easily gleaned from the police blotter, while the collection and preparation of more constructive stories would require a much larger staff than most of these publications can afford.

"We conceive it as our job here not only to provide this press, on request, with releases on USDA activities and program developments, but also to indicate how colored farm people are participating in USDA programs. Releases of the latter type are always received enthusiastically by the Negro press and are given space comparable to that accorded protest items which its own reporters gather.

"It seems to me that our releases which show how Negro farmers succeed by following USDA-recommended practices do at least two things: They facilitate the work of the colored county agents by helping to stimulate colored farmers to do a better job, thereby making them more receptive to Extension's educational program; second, they impart to colored farmers an increased sense of dignity in their occupation. This helps stabilize the Negro farm population, thereby contributing to the conservation of both natural and human resources."

Getting things done

It is our opinion that you will find a good many helpful hints in the book by Donald A. and Eleanor C. Laird, called "The Technique of Getting Things Done," published by Whittlesey House of New York City, and available at libraries and bookstores.

Danger on the farm

LIFE ON THE farm is far more hazardous for the operator and his son than for the farmer's wife and daughter, according to a survey of farm accidents by the Bureau of Agricultural Economics. On the 15,000 farms surveyed, about 4 times as many farm men and boys between the ages of 14 and 64 suffered injuries from accidents as did farm women and girls. Of the youngsters under 14 who were injured, nearly 65 percent were boys. Of the total number of accidents 56 percent were connected with farm work and only 8 percent with housework.

Men led in all types of accidents, with one small exception—burns and electric shock. This classification, in which women led, amounted to only about 4 percent of the total accidents reported. Falls injured more farm people than any other kind of accident. Most common were falls on steps and stairs and from vehicles. Here again men suffered twice as much. The most dangerous age for accidents to both men and women on farms is anywhere from 25 to 64 years, when nearly 60 percent of all accidents took place. The survey findings showed that the period from 25 to 45 is slightly more dangerous than the later years.

Feathers

IN A VERY lucid and readable address he gave recently in Kansas City, Harold P. Lundgren of our Western Regional Research Laboratory remarked:

Feathers are generally considered to be insoluble, indigestible, and relatively uninteresting material. They are, however, pure protein. When Nature designed feathers as a covering for our hens and roosters she selected a material admirably suited for the purpose. It is tough, water-resistant, and warm.

Moreover just the right protein was used for the purpose, and one quite different from that utilized in making eggs, flesh, or blood. All proteins are similar in composition and all are composed of two dozen or so amino acids, of which each contains several, attached end-to-end to form long, stable, threadlike molecules. These all but invisible threads are flexible and are also capable of attaching themselves to one another by an almost zipperlike method using what chemists call cross-bonds.

In nature proteins are cross-bonded in all sorts of ways giving them strikingly different properties—even rolled up into globules in proteins of blood and eggs, but hooked into extensive networks in feathers. Naturally, since feathers contain attractive threadlike molecules,

chemists look upon them as promising raw material for synthetic fiber, but how can they be transformed into usable shape? This may be done in various ways, including complete disintegration of the feathers or special chemical treatments which effect partial disintegration only, severing the cross-bonds but leaving the threads.

Two methods have been worked out involving partial disintegration of the feathers by chemical treatments. By means of these a solid protein residue is prepared suitable for conversion into fibers. The pure feather protein is finally dissolved in alcohol-water mixtures, or in water, and the resulting highly viscous liquid is extruded through tiny openings of a spinnerette into a solution of acid which congeals it as thread. This spinning process closely resembles the spider's. But the cross-bonds between the thread-like molecules are now weaker than in feathers, hence the fiber is weaker when wet than desired.

So far it can be used only for purposes where strength is secondary, though the defect can be remedied somewhat by treating the fibers with curing agents. But even now it finds use in specialty materials such as industrial filters requiring good resilience or for mannikin wigs wherein appearance is primary. The fibers have the warmth, softness, and dye characteristics of wool. In time our chemists will undoubtedly get them to the point where feathers will no longer be regarded as uninteresting, but will become an important agricultural raw material for industrial use. Meanwhile feather protein has potential uses also in making sizing, adhesives, plastics, cold-water paints, plaster retarders, and inks.

Brief but important

The mechanical farm

A comparatively new publication entitled "Progress of Farm Mechanization" has appeared as M. P. No. 630. It is by Martin R. Cooper, Glen T. Barton and Albert P. Brodell of the Bureau of Agricultural Economics. It is divided into four main parts, one each on: Achievements of mechanization, changes in the pattern of mechanization, mechanization and production costs and returns, and another 30 years of mechanization; there is a statistical appendix. It is a complete and quite readable treatment of the subject.

Articles about USDA

The Journal of Home Economics for February contains an article entitled "Vegetable Variety Affects Human Nutrition," by Dr. B. L. Wade, on the work of his laboratory, the U. S. Regional Vegetable Breeding Laboratory, Charleston, S. C. Practical Home Economics for February contains one entitled "Teaching Test Tasters To Taste," by T. Swann Harding, regarding certain work carried on at the Department's Northern Regional Research Laboratory, Peoria, Ill.

USDA: March 15, 1948

Wheat-flour situation

Secretary Anderson summarized the wheat and wheat-flour situations in a statement released February 5. He said that he believed our total exports of wheat and flour would run 450 million bushels and might attain 500 million in the current fiscal year, if grain savings in livestock feeding were great enough, making our total grain exports between 520 and 570 million bushels. Ask USDA's Press Service for No. 278. His talk on "Taking Stock of the World Food and Market Situation", February 18, might also be of interest to you; write Press Service for No. 359.

Food conservation

Secretary Anderson presented his views on food conservation by consumers, February 5, before a group representing scores of national organizations which had been called in to advise the USDA on this subject. For details ask USDA's Press Service for No. 281.

You might like to—

Look up these two articles in the Journal of the American Medical Association for February 7: Human Brucellosis: Its Specific Treatment with a Combination of Streptomycin and Sulfadiazine, by a group of St. Louis physicians; Margarine and the Growth of Children, by three Chicago specialists including Anton J. Carlson.

Fruit and soil

Oliver & Boyd Ltd., of Edinburgh, have just issued a collected edition of the John Innes Leaflets, prepared by the staff of the John Innes Horticultural Institution, Merton, Bayfordbury, England, and edited by the Institution's brilliant director, Cyril D. Darlington. Here is material of interest to growers, gardeners, and seedsmen on composts, soil sterilization for pot plants, fertility rules in fruit planting, growing tomatoes, and producing pure seed. Library has a copy of this book.

Wasting the soil

Kenneth W. Hunt, Director of Glen Helen and associate professor of biology at Antioch College, has an interesting article in Winter 1947-48 Antioch Review entitled "Nature's Ne'er-do-well". The article deals with soil exploitation and gives USDA agencies plenty of credit for conservation measures.

Atomic energy in agriculture

We have sufficient copies of a "Summary of Applications of Radio-isotopes to Agricultural Research," prepared by Drs. Nathan H. Woodruff and Stephen P. Cobb, Jr., Isotopes Division, Atomic Energy Commission, to supply your demand—we hope, we hope. Here are details on agricultural research now under way using radioisotopes. Write, please do not phone, for copies—addressing T. Swann Harding, Office of Information, USDA, Washington 25, D. C.

First cash award

In the next issue of USDA we hope to tell you about the Department's first cash award of \$50 which went to Miss Bernice Dismukes, who works in the Montgomery, Ala., Area Finance Office of Farmers Home Administration. Chalk up one first for Miss Dismukes and another first for FHA. Watch for this story.

New administrative regulations

Have you seen the new Administrative Regulations? Better—have you seen our old regulations in their new dress? They are just out, all 8 titles, with an Index and a Forms Appendix on the way. More on this later with a list of the sources from which the new Administrative Regulations were codified.

DOES USDA REACH YOU?

If you miss a single issue, please without delay communicate in writing or by phone (Ext. 3185) with Mrs. Monica T. Crocker, Office of Personnel, Department of Agriculture, Washington 25, D. C., who has handled distribution of the employee house organ for some years. Unless she is notified immediately you fail to get an issue, she has no means of knowing whether distribution is effective. Please do not neglect this.

Schuster passes

The Portland-Oregonian of February 7 announced the sudden death from heart failure of Carl E. Schuster, 58, a USDA horticulturist stationed at Oregon State since 1929, and associated with Oregon's nut-growing industry for more than 30 years. Widely known throughout the Northwest, Schuster died in Corvallis; he was an Ohio native who came to Oregon in 1912, and attended Oregon State after 2 years at Ohio Wesleyan. He retired in 1941.

King honors Bishopp

Dr. F. C. Bishopp of our Bureau of Entomology and Plant Quarantine was recently awarded His British Majesty's Medal for Service in the Cause of Freedom, in recognition of his valuable services to the Allied war effort in various fields of scientific research and development. Lord Inverchapel, the British Ambassador, conveyed his personal congratulations as well. The decoration will be tendered the Chief of Protocol, Department of State, who will hold it until Dr. B. can legally receive it. Because of material shortage in the United Kingdom, it will be some months before the insignia becomes available, but the ribbon will be sent the Department of State in the near future. This is a signal honor for a USDA worker.

You may want these

The effectiveness of quarantine lines and supplementary protective zones, established to prevent further spread of foot-and-mouth disease in Mexico, is now under critical test. (Details in No. 326.) * * * A conference of research workers held in Washington, February 10-11, agreed upon a national research program to develop improved methods of combating anaplasmosis. (Details in No. 333.) * * * Administrator E. A. Meyers' interesting speech, delivered February 13, on "Agricultural Engineering Responsibilities and Opportunities Under the Research and Marketing Act" is No. 327, and Under Secretary Dodd's informative address on "World Food Needs," delivered the same day, is No. 312. Write Press Service, USDA, Washington D. C., for these releases.

ORIGIN STRUCTURE, FUNCTIONS

USDA Document No. 1, entitled "Origin, Structure, and Functions of the U. S. Department of Agriculture," has been revised and a new issue, dated March 1, 1948, is ready for distribution. Since "Constituent Agencies of the USDA" had to be discontinued, because of shortages in funds and personnel, this is the only current publication which contains this information. But please do not order more than half a dozen copies; get along with as few as you can. If you need them wholesale, maybe you can borrow our stencil. Write—please do not phone—for copies to T. Swann Harding, Office of Information, USDA, Washington 25, D. C. If your need is desperately urgent, phone Miss Arden, Ext. 4619, or send your messenger to her room, 535 A.

Public information

Anybody in information work, or remotely connected therewith, will find much of interest in Dick Fitzpatrick's article on "Public Information Activities of Government Agencies," in Winter 1947-48, *Public Opinion Quarterly*, published at Princeton, but which periodical comes to USDA's Library.

The convivial respondent

According to Jan Stapel of the Netherlands (Public Opinion Quarterly, Winter 1947-48) rotund and convivial persons are quite likely to answer interviewer's questions in one way, which thin, lanky persons would answer in another. For what the respondent answers depends largely upon whether he or she is corpulent or thin, talkative or reticent, convivial or taciturn. It is even possible to classify respondents in a public opinion poll as to certain general personality characteristics. (Incidentally very thin interviewers tend to think that the plump people they question are abominably fat; rotund interviewers are more tolerant than that!) For more detail see the original article.

Inter-American Institute

Ralph H. Allee, successor to Earl N. Bressman as Director of the Inter-American Institute of Agricultural Sciences, located at Turrialba, Costa Rica, is author of a good concise article about that institution, in *Higher Education* (published by the U. S. Office of Education, Federal Security Agency) for February 15. The title: "The Americas Build an Institution." If you know little or nothing about this interesting venture in service and education, you might care to read up on it.

Appetite and diet

Many scientific investigations have been performed which indicated that experimental animals—and even just weaned human infants, before their taste had been contaminated with highly sophisticated foods—could select nutritionally sound diets guided only by their appetites. Now work on rats, by Dr. E. M. Scott of University of Pittsburgh, throws doubt on some of these findings, for these animals failed to select foods containing essential protein, and almost starved to death. There was a marked variation in their individual ability to select any foods, even under highly standardized conditions. Rat A might do quite well by himself, but his brother from the same litter might eat very poorly and almost starve to death when offered the same dietary essentials. Appetite is not to be wholly ignored in selecting the diet, but education and intelligence also count heavily.

Clover for the heart!

Dicumarol, the drug Dr. Karl Paul Link of Wisconsin Agricultural Experiment Station derived from spoiled sweet clover, is again in the news. Additional tests indicate it may give many sufferers from coronary thrombosis a new lease on life. For survivors of a first attack usually have less than an even chance of living an additional two years because clots (or thrombi) left clinging to the walls of the heart chambers tend to grow, break loose, and again dam up the blood stream, causing another and often fatal attack. Proper oral dosage with dicumarol reduces the clotting power of the blood and tends to prevent such tragic sequels. While it does not dissolve clots already present it does prevent the formation of others.

Bergin to Army

Howard B. Bergin, transportation rate specialist, in the Marketing Facilities Branch, Transportation Rates and Services Division, Production and Marketing Administration, effective February 17, transferred to the Army for transportation service in Japan.

A consumers' guide

Your attention is called to newly revised Miscellaneous Publication No. 533 entitled "A Consumers' Guide to U. S. Standards for Farm Products," prepared by Catherine M. Viehmann of Production and Marketing Administration. Procure copies if interested in U. S. Standards for various meats and poultry, eggs, butter, cheese, processed and fresh fruits and vegetables, dry beans and peas, rice, honey; also contains information on grade specifications, the desirability of simplified grade names, containers, methods of setting up quality standards for farm products, and a useful brief list of USDA publications of interest to consumers.

Statisticians

Statistics is a grave and it seems utterly fascinating word with all the excitable qualities of a dab of cottage cheese. But the statisticians of the Bureau of Agricultural Economics, who keep tab on crops in each of the States, are interesting human beings performing a not only useful but important and essential service. We were glad to see an article in the Magazine Section of the Seattle Sunday Times for February 8, which gave graphically the facts about BAE crop work in Washington State, how it is done, and the magnitude and value of the statistics gathered and issued. BAE statistician in charge, Haven C. R. Stewart, is pictured; also shown are Mrs. Beverly Thompkins, Alton R. Larson, Lorraine Berry, and James Thompkins of BAE's Seattle staff.

Farm health

Neglect of farm health was again stressed at the February meeting of the National Conference on Rural Health, sponsored by the American Medical Association and held in Chicago. Again it was brought out that the best developed school health programs were to be found in urban rather than rural areas, that 40 million Americans, mostly in rural areas, do not have even a local health department, and that many rural communities lack physicians, nurses, hospitals, and laboratory and X-ray service. Dr. Edward L. Bortz, President of the AMA, pointed to the data the association had collected and announced its willingness to work on national problems of this kind. He also said that local problems can often best be worked out at the community or county level.

This you must see

William H. Cheesman, technical editor at Bureau of Plant Industry, Soils and Agricultural Engineering, not long ago addressed a USDA Graduate School class on "Editorial Problems at the Plant Industry Station". Out of his long experience he discussed the kind of errors our editors harpoon and accuracy in general, choice of words, punctuation, the problem of being concise, clarity, emphasis, and the common abuse of the passive tense. In each case he used a wealth of illuminating illustrations. We have sufficient copies (we hope) to supply your demand, if you write, instead of phoning (this puts Washington employees on even keel with field workers), to T. Swann Harding, Office of Information, USDA, Washington 25, D. C.

Rural fiction

Caroline Sherman, of Bureau of Agricultural Economics, has issued her annual list of Selected Rural Fiction in 1947. We suggest that you write and ask for it, to get comments on some of the following books you might care to read: *Farm in Provence*, Henri Bosco; *While the Angels Sing*, Gladys Hasty Carroll; *Years of the Locust*, Loula Grace Erdman; *This Is the Year*, Felke Folkema; *The Gentle Bush*, Barbara Giles; *The Thresher*, Herbert Krause; *The Hunter's Horn*, Pierson Ricks; *Second Growth*, Wallace Stegner; *The Quarry*, Mildred Walker. Miss Sherman is an expert and a sound guide to rural fiction.

FCIC Board

The Secretary, on February 16, appointed two private insurance men to the Board of Directors, Federal Crop Insurance Corporation. They are James B. Cullison, Jr., Chicago, Ill., and Clarence W. Swanebeck, Fenton, Mich. The former has had wide experience in hail insurance on growing crops; the latter is an officer in one of the largest farm mutual companies in his State. Further detail will be found in No. 334; write Press Service, USDA.

Eating and polio

Research by Profs. Paul F. Clark and Conrad Elvehjem of University of Wisconsin indicates that diets lacking certain vitamins or other nutritional factors tend to inhibit the course of poliomyelitis in mice. Paralysis in mouse polio has been altered or prevented by restricting the intake of vitamin B-1, potassium, phosphorus, and tryptophane, but this does not destroy the virus in the body.

Effects of home cooking

It is not the vitamins and minerals that are in foods when purchased, but those which survive the processes of home food preparation and actually nourish us that count. Now, in M. P. 628, four specialists of the Bureau of Human Nutrition and Home Economics, report their studies on the Vitamin and Mineral Content of Certain Foods as Affected by Home Preparation. They started out with a preliminary study of 20 foods, including vegetables, meats, poultry, breads and cereals, and then made still more extensive studies of potatoes, carrots, and peas. Effects of cooking on the following values were determined: Ascorbic acid, dehydroascorbic acid, carotene, thiamine, nicotinic acid, riboflavin, ash, calcium, phosphorus, iron, and moisture—though not for all foods in all cases. The standardized cooking procedures studied were boiling, baking, steaming, cooking in a pressure saucepan, simmering, braising, and frying. The report is intended for research workers in nutrition. For more detail on the investigation and its results get the Miscellaneous Publication itself.

RETIREMENT

Passage of the new retirement bill is naturally of the highest interest to you. This new law differs from the old in its provisions for optional retirement, disability retirement, computation of annuity, joint and survivorship annuities, and in many other respects, including the abolition of tontine and provisions for widows' and childrens' benefits. Employees already retired will also have their annuities increased. You will find details in a mimeographed document that will be mailed to you if you write, please do not phone, T. Swann Harding, Office of Information, USDA, Washington 2, D. C. Or you may get your information through your own bureau personnel channels.

MARCH 15, 1948

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USDA

FOR MARCH 29, 1948

Public Law 402

CONGRESS HAS expanded to the Eastern Hemisphere the United States program of international collaboration in agriculture, which hitherto has been legislatively restricted to the American Republics. The United States Information and Educational Exchange Act of 1948, referred to during Congressional discussion as the Smith-Mundt Bill, and which become Public Law 402 of the Eightieth Congress with President Truman's signature, authorizes our cooperation with countries anywhere in the world in carrying out technical and scientific programs for the benefit of agriculture.

USDA, primarily through its Office of Foreign Agricultural Relations, Bureau of Plant Industry, Soils, and Agricultural Engineering, and other agencies, for the past 5 years has collaborated with other Western Hemisphere countries in such programs. The Department is now authorized to negotiate Memoranda of Understanding with governments of Eastern Hemisphere countries, providing for establishment of agricultural stations in, and the assignment of technicians to, cooperating countries to assist in planning and carrying out programs designed to increase agricultural efficiency, improve living levels, and promote international prosperity.

Public Law 402 also authorizes United States participation in a world-wide program of international exchange of agricultural leaders, teachers, and technicians, and for sending of agricultural missions to other countries upon invitation. This sharing of our technical knowledge will constitute no drain upon our resources, but will enrich the knowledge of our technicians, enable our farmers to obtain greater supplies of propagating materials from abroad, encourage international exchange of products, and permit greater international cooperation in combating plant and animal pests and diseases.

New Administrative Regulations

THE NEW USDA Administrative Regulations are out. Secretary Anderson put them into effect March 8, 1948. We say they are "new" but there are *very few* new requirements or changes in the regulations.

The new Administrative Regulations were codified by the Department's Staff Offices from 21 sources: USDA Regulations, Secretary's Memoranda, Budget and Finance Circulars, Personnel Circulars, Plant and Operations Circulars, and Information Memoranda, to mention only a few. The new regulations are organized in 8 titles in the style of the United States Code and contain about 2,200 pages. The old source materials had 5,000 pages. Amendment No. 1 for each title, dated March 8, 1948, brings each up to date, and explains how to use it. Attachment No. 1 lists all the sources, 13 of which are "obsolete in entirety." Among these 13 is the USDA Regulation which can now be discarded. *The regulations are easier to find and the new arrangement will save your valuable time. Farewell, little black book.*

In this foreword, Secretary Anderson says:

I wish the . . . agencies of the Department would cooperate in reviewing the Administrative Regulations to see where they can be simplified . . . Field offices should be brought into these reviews Requirements which look good in Washington may work very badly in the field.

Mr. W. A. Minor, Chairman of the Administrative Council, asks us to ask you to spend some time right now getting acquainted with your new companion.

Economic poisons

If interested in the cautionary statements suggested for the labeling of economic poisons containing 2,4-D, to warn users of possible harmful effects on valuable plants and crops write Press Service, USDA, Washington 25, D. C., and ask for No. 431.

First cash award

MISS BERNICE DISMUKES of Farmers Home Administration was the first USDA employee to receive a cash award for a suggestion. Miss Dismukes, an accountant in the FHA area finance office at Montgomery, Ala., received \$50 for her proposal to simplify the method of processing pay rolls for its 9,000 county committeemen. Her plan, which has already been adopted and put into operation, simplifies record keeping and saves nearly 100 hours a month of accounting time. The presentation of the award was made during a special ceremony, in which Dillard B. Lasseter, Administrator of FHA participated. Miss Dismukes has been with the FHA and its predecessor agencies since December of 1935, having started work in the early days of the Resettlement Administration in the office at Montgomery.

In a letter to Miss Dismukes at the time her suggestion was accepted, Secretary Anderson wrote:

Your suggestion is No. 1 on the records of the Board. I want to congratulate you on being the first employee of this Department to receive a cash award under the Suggestion Program. Your suggestion is appreciated. You deserve the award. It is typical of the many more we hope to receive from you and others. In a pay-roll procedure involving 18 steps you have reduced the steps to 15, you have saved \$1,215.42 in work time in the first year. We need many more like this one. The Suggestion Awards Board wishes to join me in this letter of congratulations.

A. B. Powell, Area Finance Manager at Montgomery, says "Miss Dismukes is a high-caliber employee, with a consistent reputation for initiative, industry, and efficiency during the 13 years she has served here." Eligible for consideration to receive such awards are any Federal employees who make suggestions that may result in greater economy, increased efficiency, conservation of property, improved employee working conditions, better service to the public, or similar benefits. A Suggestion Awards Committee serves in each agency and passes upon the value of suggestions offered. *You too can win an award!*

TRAINING IN MARKETING

A special in-service training program in marketing for USDA employees begins today, March 29. The program is prompted by the need for qualified personnel in carrying out the Research and Marketing Act of 1946. Dr. Irwin Hedges, on leave from the Cooperative Research and Service Division, FCA, will organize and coordinate the work. USDA staff members will be aided by outside specialists in acting as instructors and lecturers. For details contact Graduate School, Ext. 6337.

Reading

READER'S DIGEST for February ran a story about certain alleged publications of the Department of Agriculture which, *it said very plainly*, did not exist and had never been issued by USDA. Other statements were made which were incorrect, but the whole point to the story was that the publications did not exist. Among them was the mythical and by now legendary Love Life of the Bullfrog, a hardy perennial that crops up annually, no matter how much its existence is denied. The point is that the Department had 50 to 75 requests for these publications which the Reader's Digest plainly stated never existed.

Many of these requests came from well-educated people, college students and the like. Some came from teachers of biology who wanted to order copies for use in their classes; others still came from university faculty members writing in all seriousness. How is it possible for people to read so carelessly? Yet we have constant evidence that they do. Recently much effort has been devoted to making reading very simple by the use of words and syntax which are shown to be easily read. But should not something be done to teach people how to read, and to foster precision of expression and vocabulary enrichment?

Recently the University of Wisconsin queried 2,500 farmers on 25 words found in agricultural bulletins and circulars prepared for farmers. The meanings of the following words were not known to from a fifth to two-thirds of these farmers: Fetus, agglutination, gastric, virus, lactation, antibody, feces, hormone, infestation, lesion, toxic, succulent, pulmonary, secrete, and purgative. From 10 to 20 percent of them did not know the meaning of ensile, sanitation, and placenta, but practically all of them knew the meaning of colostrum, palatable, insecticide, medication, disinfect, and nutrient.

Given the consummate ease with which quite young children learn and properly use entire new technical vocabularies connected with radio, airplanes, automobiles, and sports, why is it too much to expect that those who read acquaint themselves with the vocabulary which makes English flexible, rich, and precise? This vocabulary enables technicians to speak shorthand. What is so difficult about learning it? And why has this generation and the last not been taught to read plain English understandingly and with care?

"Wonderland kitchen"

THIS IS HOW Pathfinder Magazine, February 25, described the new step-saving farm kitchen on exhibit in the Patio of the Administration Building last month. Washington employees had the advantage of you field people in being able to see the kitchen itself, and to have the experts describe and demonstrate such labor-saving features as revolving corner shelves, file sections for large trays and platters, and a planning desk that can double as an extra table or tea cart. However, if you want to see what the kitchen looked like in color ((yellow (jonquil, to you ladies), blue, and coral)), read Lenore Sater's article in Farm Journal for March. Miss Sater, Human Nutrition and Home Economics, and her staff built the kitchen at the Agricultural Research Center in Beltsville. This Week Magazine, March 14, also carried an illustrated story about the kitchen.

Other recent magazine articles of interest to USDA employees include Chicken in the Pot, March issue of Seventeen; Arrest Those Vitamins, February issue of Better Health, North Carolina's new health magazine; and Blood Drug, Pathfinder, February 11. This last article brings the story of rutin up to date, and describes the work of Dr. James F. Couch and associates at the Eastern Regional Research Laboratory. Another story in the same issue, Sugar-Coated for All, points up the work of Department chemists in adding soybean protein to candy to make it more nourishing.

Wheeler goes to State

WITH THE resignation on March 1 of Leslie A. Wheeler as Director of the Office of Foreign Agricultural Relations, Secretary Anderson named Fred J. Rossiter as Associate Director, and Acting Director pending designation of a Director of OFAR. Rossiter, an Iowan, began 11 years work in the Far East in 1920, going from Iowa State College to an agricultural mission in China. He served in Europe during World War I in naval aviation. He has been with OFAR since 1930, including 5 years as assistant agricultural attaché in China and, since 1940, head of OFAR's Fats, Oils and Rice Division.

Wheeler enters the Foreign Service as Counselor of the United States Embassy in Mexico after 22 years with the Department of Agriculture, first in the Bureau of Agricultural Economics and, since 1939, as Director of OFAR. He is chairman of the International Cotton Advisory Committee and of the International Wheat Council.

Wheeler was in the foreign work in BAE which later became OFAR, though his Government service began with the Bureau of Foreign and Domestic Commerce, Department of Commerce, in 1923. His work in connection with the International Wheat Agreement was most outstanding. Said the Secretary in his letter to Wheeler: "To say that I wish you well in your new undertaking is putting it mildly. I congratulate the State Department upon obtaining your services in spite of the high cost to the Department of Agriculture."

Person honored

DR. HARLOW S. PERSON, who spends part of his time as consulting economist on the staff of Rural Electrification Administrator Claude R. Wickard, has received the Gold Medal of the International Committee of Scientific Management, the highest award in the field of management engineering. This medal has been awarded to only five others since it was first presented in 1924. Dr. Person is the second American to receive it. The medal was awarded at the Eighth International Management Congress at Stockholm in July of last year. Since Dr. Person could not attend that Congress, the U. S. National Management Council accepted it in his behalf.

Actual presentation to Dr. Person was at the annual dinner meeting of the Council in New York on February 6. Morris L. Cooke, first REA Administrator, who brought Dr. Person into the REA staff, made the principal address. Award of the medal was at the recommendation of the Nederlandsch Instituut voor Efficiency. The citation reads, in part:

Dean of the first business school to teach Scientific Management.
Distinguished Managing Director of the Taylor Society and Editor of its epoch-making Bulletin.
As practitioner, made unique applications of Scientific Management to government operation, national and international.
Widely recognized expositor of a philosophy of management squared with modern economics and tenable in a moral world.

Mrs. S. D. Pierce

On that leap-year day at the end of February Mrs. Pierce retired, after nearly 30 years service in the Division of Publications. She reported in 1918 to Charles H. Great-house, then in charge of the indexing work who, incidentally, himself retired a quarter of a century ago and still flourishes at 90! A native of Florida, who formerly taught school there and was postmistress at Cleveland, Fla., Mrs. Pierce has spent most of her career in the preparation and maintenance of indexes, though for a decade she handled a mountain of correspondence requesting information on all phases of agriculture. Mrs. Pierce will remain in Washington.

Blowflies

BECAUSE OF their apparent correlation with poliomyelitis, blowflies have received much public and scientific attention within the past year or two. The Thomas Say Foundation of the Entomological Society of America has just published a book entitled "Blowflies of North America" (477 pp., 9 text figures, 4 4-color process plates, and 46 plates of black-and-white line drawings, Monumental Press, Baltimore, Md.), by David G. Hall, Bureau of Entomology and Plant Quarantine.

The book summarizes all biological information so far recorded about blowflies. It describes their various stages and discusses their habits and disease-carrying propensities. It gives suggestions on their control. Keys and descriptions for the rapid identification of such flies are given for all known species occurring north of the Panama Canal Zone. Instructions are given for rearing, collecting, preserving, and studying blowflies.

The author illustrated his own work, and it is apparent that he is an artist as well as an entomologist. He is best known for his control of insect-borne disease in Saipan, Marianas Islands, during the recent war, for his initiation of the use of large cargotype aircraft for the spraying of great areas in the Pacific islands, and for his designing of spraying equipment installed in such planes. For his work in Saipan in 1944, he was awarded the Army's Legion of Merit Citation in early 1946.

Brief but important

PAN AMERICAN DAY

April 14 is Pan American Day, and the customary Washington and field activities are being planned. Observance throughout the Nation is urged. Kits of materials are being and will be supplied, there will be a Patio exhibit in the Administration Building featuring complementary crops, and an afternoon movie show in Jefferson Auditorium. Field folk get busy and do all you can to make the celebration a success.

USDA

We find many Washington employees unaware that USDA is a Nation-wide Department of Agriculture employee house organ. It reaches all employees in the United States. Approximately 25,000 copies of each issue are printed and distributed, distribution being in the hands of Mrs. Monica T. Crocker, Office of Personnel. Hence items herein must be of interest to every employee, not just to Washington people; besides Washington is the mere tail the dog wags—for we have five to six field employees to one in Washington.

USDA: March 29, 1948

Yarn by Handsome Hal

Handsome Hal (Harold W.) Baldwin, agricultural editor at the University of Connecticut, ornaments March American Mercury with a mighty good yarn entitled "The Airplane Helps the Farmer." Hunt this one up.

Sugar in maize

A few issues back we had something to say about the possibilities of making sucrose, or ordinary table sugar (not "corn sugar") from cornstalks. W. Ralph Singleton of the Connecticut Agricultural Experiment Station reported further on this possibility in Science for February 13. Whereas the juice of normal cornstalks varies in sucrose content from 1 to 4 percent, a Connecticut field corn inbred has been developed which contains sucrose in amounts approaching sugarcane—8.65 percent, along with 2.6 percent of invert sugar—a total of 11.25 percent total sugar. This work ties in closely with much early work carried on by USDA.

What makes bread stale?

The scientists are going to find out. Contracts have been awarded under the Research and Marketing Act of 1946 for projects to study the causes of flavor deterioration and staling of bakery products, also to seek new methods and official standards for measuring the bread-making quality of wheat. The Grain Advisory Committee endorsed the projects which will be carried on by outside agencies; you will find details in No. 388, available from Press Service.

Gregg is dead

Just as it comes as a shock to know that the composer of that bibulous ballad "Sweet Adeline" is still alive in Chicago, it may also surprise some to know that John R. Gregg, inventor of the Gregg system of shorthand was alive in New York until the afternoon of February 21, when he died at the age of 80. A native of Ireland, he began to study shorthand systems in his early youth, and published his first pamphlet on the subject in 1888, while teaching in Liverpool. He borrowed funds thus to present his system for the first time. He started business schools in Toronto and in Chicago and, at one time, had 35 of them in the British Isles. He headed his various enterprises here and in Britain to the end and died at his home in New York City. His famous first pamphlet was entitled "Light-Line Phonography."

Motor-fuel progress

Highlights of an address by Director G. E. Hilbert of our Northern Regional Research Laboratory before the National Farm Chemurgic Council Meeting at Omaha, March 3, were: (1) Blending 1 gallon of ethyl alcohol and 9 gallons of low-grade gasoline will make 10 gallons of premium grade antiknock motor fuel; (2) or using a small gadget that automatically injects a mixture of alcohol and water into the engine when it is under heavy load will let a truck driver take the hills in high instead of at 5 miles an hour; (3) for passenger cars, the adoption of engine devices already available, would enable drivers to get a similar advantage from alcohol-water injection while using low-octane gasoline as the principal fuel; (4) development at the Northern Regional Research Laboratory of fungal amylase as a substitute for malt in manufacture of alcohol from grain reduces the cost of alcohol by about 3 cents a gallon; (5) progress has been made in development of economies in the process for manufacturing alcohol from farm wastes such as corncobs, and tests are now under way on a semicommercial scale. For more detail on this remarkably interesting subject, write Press Service, USDA, and ask for No. 463.

Indispensable?

Any time you feel indispensable take a walk through a cemetery and read the headstones. Those guys were pretty hot stuff, too.

Unused chemicals

DDT and the sulfa drugs were known long before they came into active use. They gathered dust on laboratory shelves for years. They were merely dormant chemical curiosities. So a far-reaching movement has been launched by the Chemical-Biological Coordination Center, of the National Research Council in Washington, to test the activity of thousands of compounds, and to record the results in such a way that all pertinent information will be readily available for those seeking improved drugs, insecticides, fungicides, rodenticides, or what have you. Most of these chemicals have undergone no general tests and only a few have been tested for specific purposes, yet they exist in thousands. Some 25 laboratories will carry on the tests, the results of which will be recorded on cards by code numbers; machines sort 20,000 of these cards per minute and answers to pertinent questions about the various chemicals will thus become instantly available.

Malthus

A century and a half ago an English clergyman, Rev. Thomas Robert Malthus, propounded the grim formula that, since population increases geometrically and food supply only arithmetically, the world requires recurrent wars, pestilences, and disasters to rid it of surplus humanity. However, in 1798, it was difficult for him to foresee the tremendous advances that would be made in all fields of agricultural technology, making it increasingly easy for farmers to produce more with less labor. But he was very up to the minute in titling his treatise published in 1800 "An Investigation of the Cause of the Present High Prices of Provisions." Moreover, the world's population has increased from 2 to 2½ billions during the past decade, and approximately 20 million persons annually are being added. Agriculture's stupendous job is to produce and distribute sufficient food to provide an adequate diet for all. For more details see "World Food Needs," a speech delivered February 13 by Under Secretary Dodd; ask Press Service for No. 312.

OPEDA

OPEDA is the Organization of Professional Employees of the Department of Agriculture. Its council has re-elected President M. C. Merrill, Vice President George A. Collier, Secretary-Treasurer Walworth Brown, and most of the elective members of the executive committee to serve through 1948. It also ratified the selection of L. F. Kneipp to fill the recently created position of executive officer. Entering Federal service in 1900 as a forest ranger in Arizona, Kneipp was transferred to USDA in February 1905, and served continuously until retirement, December 31, 1946, as Assistant Chief of the Forest Service, a position he assumed in 1908. His legislative, intradepartmental, and interdepartmental experience has been extensive and varied. As OPEDA's executive officer, duly registered under the Federal Lobbying Act, he will be able effectively to express the views of the members of OPEDA with respect to pay increases, retirement, more equitable disability provisions, more adequate rates of subsistence per diem, sabbatical leave, reorganization, changes in classification principles and procedures, and other subjects similarly of current and vital interest to the professional employees of the Department. Contact him for detail about activities or joining up.

The Insect Pest Survey and Information Division, Bureau of Entomology and Plant Quarantine, has compiled a list of articles published from that bureau in 1946. It gives full bibliographical citations to 329 articles which are classified as to subject matter and indexed by authors.

Meat

If you want the inside dope on meat and livestock we suggest you read *A Look Ahead on Meat*, by Charles A. Burmeister, in *Marketing Activities* for January, procurable from Production and Marketing Administration.

Price support

Secretary Anderson's letter to Senator Capper on price support legislation, dated February 26, has prime policy value in this connection. If interested write Press Service and ask for No. 421.

Newsletter

The Office for Food and Feed Conservation, USDA, Charles F. Brannan, Director, issues a regular processed Newsletter; if interested in its content and OFFC activities, just address Don Lehman.

Unique museum

Rutgers University would like naturalists to know about its Serological Museum for the collection, preservation, and study of the blood and tissue proteins of organisms of all kinds. Dr. Alan Boyden, who has headed Rutgers' work in systematic serology since 1925, invites correspondence.

RMA progress

On March 3 a Report of Progress Under the Research and Marketing Act of 1946 was issued by E. A. Meyer, Administrator of the Act. You may get this or any other material regarding the work being done by writing, not phoning, to Press Service, USDA. Ask for No. 465 if you want this summary.

Sugar beet mechanization

University of California is erowing over its contributions to the mechanization of the beet sugar industry, in particular its development of a mechanical sugar beet harvester using only three men instead of the hundreds needed for hand harvesting. The machine digs the beets, tops them, leaves the tops in a neat windrow, shakes off the dirt and elevates the beets into a hopper as it moves slowly along the rows, in fact does about everything but extract powdered sugar from them and sprinkle it over strawberries. For more detail ask UC's Agricultural Information, 331 Hilgard Hall, Berkeley 4, Calif., for its January 14 and 15 press releases on this subject.

Bennett wins Cullum Medal

Dr. Hugh H. Bennett, Chief of the Soil Conservation Service, was awarded the Cullum Gold Medal by the American Geographical Society at its annual meeting in New York. This award is the first since 1943, and likewise the first ever bestowed upon an out-and-out conservationist. It is made at irregular intervals, and on an international basis, for outstanding original contributions to knowledge of the earth, its land and waters and human occupation. The first Cullum Medal was awarded in 1896, to Robert E. Peary, discoverer of the North Pole. The Cullum Medal was founded by Gen. George W. Cullum of Civil War fame, vice president of the American Geographical Society from 1877 to his death in 1892.

Award

On February 16 the Michigan State College Chapter of Sigma XI awarded Dr. B. R. Burmeister of the United States Regional Poultry Research Laboratory the 1948 Junior Award for Meritorious Research. Following the presentation of the award Dr. Burmeister addressed the meeting on Research in Avian Lymphomatosis.

Educational exhibits

The handsome and informative Miscellaneous Publication No. 634, entitled "Educational Exhibits, How to Prepare and Use Them," is a manual for extension workers, by H. W. Gilbertson of Extension Service. However, it should have much wider usefulness. It can be purchased from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C., for 25 cents.

Cottonseed handling

Circular 768, January 1948, Cottonseed Handling with Small Air Pipes, by Charles A. Bennett and Gerald N. Franks, is of special interest because it recounts the results of some important and useful engineering research in the Bureau of Plant Industry, Soils, and Agricultural Engineering.

Fact sheets

Fact sheets on the food and feed conservation program are beginning to appear in printed form. "Save Farm-Stored Grain from Insects!" prepared from material supplied by the Bureau of Entomology and Plant Quarantine, readably summarizes on both sides of one printed page all apposite information on this subject. It is an admirable job of making a tremendous lot of scientific material, variously published, concise and useful because it is readily comprehensible. Look for other such fact sheets.

Business of Farming

That is the title of a new book which the authors solemnly assure the reader is neither delightful, romantic, nor poetic. Since the authors are Herrell DeGraft, professor of agricultural economics at Cornell, and Ladd Haystead, who long piloted Fortune's Farm Column, they should know. However, the book is packed with readable, readily understandable information, and apposite illustrations concerning the business of farming. Its four main parts are on Soil Management, Equipment Management, Labor Management, and Farm Organization. It was published by the University of Oklahoma Press, runs 244 pages with index, and is priced at \$3.

Fur farming

You may become a successful fur farmer if you are a good businessman and your "mind and heart are with the animals at all times." The reader gathers this from Frank G. Ashbrook's (Fish and Wildlife Service) new illustrated book, *Fur Farming for Profit*, 429 bright pages, published by Orange Judd, New York City, to sell for \$4. There is fun as well as profit in this enterprise, if you are not oversanguine; see the book for details.

Calling Army reservists

Active and inactive, officers and enlisted, have a standing invitation to attend meetings of the Engineer Reserves held every 2 weeks. At the last meeting Lt. Gen. Raymond A. Wheeler, the Chief of Engineers, spoke on the "Mission and Opportunity of the Engineer Reserve." These meetings, take place at Fort Myer. Engineer Reserve Training meetings are held the second and fourth Wednesdays of each month. Next meetings will be April 14 and April 28. This is part of a Nation-wide plan to develop the organized reserve corps. For further details phone A. R. Spillers (Lt. Col. ORC) USDA, X-2270.

Antisporin

This new antibiotic, which occurs in the soil and in the tap water of Chicago, is said to be many hundred times more powerful than streptomycin for the germs against which it proves effective. Recent tests in England indicate that it actually kills germs causing whooping cough; it does not merely prevent them from multiplying, which is what most antibiotics do. Discovered at the Wellcome Physiological Laboratories, it is produced by the same organism that produces polymyxin, discovered last year at Johns Hopkins and at our Northern Lab.

Farmers' spirits

Cornell University recently acquired a copy of "A Letter on the Present State of the Labouring Classes" in America, published in London in 1827. You will be interested to know that prices were very high at that time—beef, pork, and mutton sold at 6 cents a pound, shoes were \$2, and the best French brandy was \$1.60 a gallon. But things were a third cheaper in Pittsburgh than elsewhere. Farmers were said to spend much of their time distilling "a spirit from rye, corn, and apples, which they call whiskey, and dispose of in the city." However, there was no housing problem in those days; the average family found shelter at about \$50 a year and room and board for a single man was \$2.75 weekly.

The \$4 rat

In one area of the United States it has been reckoned that rats consume or damage grain at the rate of \$4 per rodent per year. Though voracious brown and black rats are ranked as the greatest of nonhuman grain robbers, insects and fungi do their share of destruction. The Food and Agriculture Organization of the United Nations says that the 1948 world loss of grain could be cut 10 percent if proper steps are taken. While children go hungry we cannot even afford 4-cent weevils, much less \$4 rats.

Grain to meat

Writing in the New York Times, for February 21, Secretary Anderson showed that it is all but impossible for us to make any clear-cut distinction between food and feed grains, as even before World War II, 15 to 20 percent of our wheat—usually regarded as primarily a food grain—was used to feed livestock, while corn and oats are widely eaten by human beings. Furthermore it takes from 7 to 10 pounds of grain to make a pound of meat on the butcher's scale; hogs produce, about 1 pound of meat and lard per 7 pounds of grain fed. It takes 8 pounds of grain to produce 1 of dressed poultry, 5 to 6 pounds to make 1 pound of eggs (8), and 1 of grain to make 1 of milk, but both eggs and milk are more dilute foods than meat. It takes about 10 pounds of grain to make 1 of grain-fed beef, the fattening process included. More grain still is required when hogs or beef cattle are marketed excessively heavy. But a pound of grain eaten supplies about 1,600 calories, or a whole day's allowance for an average European today.

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USDA

JIM MITCHELL, Office of Foreign Agricultural Relations' technical illustration specialist, stationed in the Canal Zone, while in Washington recently, interestingly described by word and picture, how Department scientists cooperate with technicians of tropical American countries in stimulating cultivation of complementary crops, crops the U. S. needs to import.

Mitchell, formerly with Soil Conservation Service in Ft. Worth and Washington, explained how the Department shares through FAR and Bureau of Plant Industry, Soils, and Agricultural Engineering, its scientific "know-how" with other American countries to increase presently insufficient hemispheric supplies of certain agricultural products, some of strategic character. This program of international collaboration in agriculture is carried on through cooperatively established research and extension in agricultural stations in tropical America—in Bolivia, Ecuador, El Salvador, Guatemala, Nicaragua, and Peru, for example. It mutually benefits both the U. S. and the cooperating Republics, which also help pay the upkeep of the stations.

The over-all effort to encourage production of such complementary crops as quinine, rubber, fibers, and pyrethrum, includes research and extension work to increase the productive efficiency of local agricultural workers by helping them to attain higher levels of living and nutrition. A prominent feature of this assistance was encouragement of greater production of locally consumed food crops. By word and color slide, Mitchell portrayed the picturesque character of the countries where the cooperative program operates, and outlined some of the obstacles to the work, such as remote terrain, and local lack of modern farming equipment and techniques. In some areas, he explained, even such an elementary mechanical contrivance as a wheel can't be found.

One incident Jim related had considerable interest for the audience. It concerned a peculiar disease of rotenone which could not be identified locally. Finally, specimens were sent to a plant pathologist at the Agricultural Research Center in Beltsville who, though he had never been to Latin America or seen the plants growing there, recognized it as a disease of the coffee tree, limbs of which had been used to support the young rotenone plants. Once the coffee limbs were eliminated the disease vanished.

Agricultural engineering

TODAY THE world is producing less food than it did 10 years ago, for a population that has increased by 200 millions. But agricultural engineering is on the march, and it is estimated that 85 percent of the Nation's vast agricultural research program has engineering phases or implications. During the past two decades the average labor requirements for crops like corn, wheat, oats, and soybeans have dropped 20 to 40 percent. An acre of corn can be produced in Illinois with about 7 hours of labor; of soybeans with 4.

A man can turn out about 1 pound of shelled peanuts in 1 hour; agricultural engineers have perfected a machine that shells 300 pounds an hour. There is a hay baler which will pick hay up from the windrow and then turn out 6 tons of baled hay per hour. There is a flame cultivator that will cover 50 acres a day, rice fields are planted from the air at the same daily acreage rate, and we all know how quickly and effectively insecticides can be spread by air. A mechanical cotton-picker now on the market will pick up a 500-pound bale in 75 minutes, 40 to 50 times faster than hand picking, while another machine digs, gathers, grades, sacks, weighs, and delivers potatoes to a waiting truck at a saving of \$50 a day over previous methods of handling this crop.

A study based on labor-saving methods and equipment used by 5 Indiana hog producers proved that an average of 1.7 hours work per head was required to produce a 225-pound market hog; the State average was about 5 to 7 hours. Some New York poultrymen can take care of a thousand hens in 2 hours per day, but others cut this to 21 minutes. Engineering and engineering principles are constantly rendering it possible for farmers to do and to produce more with less work and in shorter time. This can do much eventually to provide food for all the world's teeming millions.

Scooped

ON PAGE 4 of *USDA* for February 16 you will find a brief paragraph headed "Scooped 2,000 years ago." Associate Editor Paul C. Burchard of Hoard's Dairyman read it and wrote to tell about his own reading of a little book, issued by Columbia University Press in 1933, entitled "Cato, the Censor—on Farming." It consisted of translations of certain parts of Cato's original book and it proved interesting because this ancient writer had so many thoroughly modern things to say. Thus he emphasized the value of legumes to the soil and the desirability of not plowing land when it is wet.

Thereupon Burchard quoted some other statements from the book which are reproduced herewith for your information:

It is from among the farmers that the sturdiest men and the keenest soldiers come, and the gain they make is the most blameless of all, the most secure and the least provocative of envy. * * * Notice carefully how prosperous the neighbors are (when purchasing a farm.) It should be in a region where owners do not often change and where those who do sell their farms repent of having sold them. * * * Have the work oxen cared for with the greatest diligence and, to some degree, flatter the ox drivers so that they will cheerfully care for the oxen.

Then, too, there was Cato's advice concerning the making of hay, which is as good today as when he uttered it and which, unfortunately, is too often disregarded:

Cut the grass crop when the time comes and take care you are not too late in cutting it. Cut it before the seed is ripe, and store the best hay separately for the work oxen to eat in the spring when they are plowing.

Mrs. Dodd

Our sympathies go to Under Secretary Dodd in his recent bereavement. Mrs. Dodd succumbed on March 6. A true farmer's wife, she went to the great Northwest in a covered wagon and often, while her husband was in Washington, took an active part in the cultivation of their acreage until the place was leased some 4 years ago.

Csonka's achievement

ALL PROTEINS are composed of a score or more simpler compounds called amino acids, variously combined. Two of these, cystine and methionine, contain sulfur. The generally accepted belief has been that individual proteins of the plant and animal world were unchanging, each one being composed of a constant proportion of certain amino acids fixed by nature. That belief has been overturned by a USDA scientist who found that it simply did not conform to factual evidence.

The scientist is Frank A. Csonka, protein research chemist in the Bureau of Human Nutrition and Home Economics, and currently working on a cooperative investigation by his bureau and the Bureau of Animal Industry. The proteins he analyzed were obtained from eggs laid by hens experimentally fed on rations exactly alike—except for the quantity and kind of protein. Some were fed a high-protein ration derived from casein, some the same from soybean meal, and the chicks hatched from their eggs were fed identical chick rations.

But chicks whose mothers had consumed casein gained weight faster than those whose mothers had eaten soybean meal. Seeking the cause of this, Csonka undertook a biochemical study of the egg-white proteins, centering it on the two amino acids mentioned above. He found that when a hen's feed contains different kinds of proteins, changes can be detected in the proportions of cystine and methionine which help make up the proteins of the egg white. This signal discovery that the composition of proteins is not immutable may help explain the mystery of how varying growth rates are transmitted from hen to chick via the egg. That is Csonka's achievement and it is very significant one.

Rainmakers all wet?

In a recent talk to USDA Extension Service workers, F. W. Reichelderfer, Chief of the Weather Bureau, Department of Commerce, said folks should be on guard lest those exploiting recent experiments in artificial precipitation cause them to sign contracts to pay for showers Nature had on the way herself. Fifty years ago Congress appropriated funds for the WB to use testing cannon blasts as rain producers. The idea and the cannon exploded together. Modern synthetic rain-making is highly scientific but bears watching in practice.

George A. Barnes

You may remember George when he was in information in Soil Conservation Service. He is now Director of Press Relations with the United Nations. He will act as Chief Information Officer, radio contact man, and censor when the UN Palestine Commission assumes its duties in that turbulent quarter, May 15. He does not anticipate that his assignment will be at all dull.

Eli Whitney

ALMOST EVERYONE knows about Paul Revere's famous "ride"—which certain historians say he never made at all; but how many know that Paul was also a goldsmith, a silversmith, and a dentist? So also Eli Whitney is widely known as the inventor of the cotton gin ("gin" is a contraction of "engine," not the name of a colorless liquid), but how many are aware that he also conceived the idea of interchangeable machine parts on which modern mass production is based?

Though his most notable invention, capable of doing the work of 50 slaves, greatly affected the South, Eli was a native of Massachusetts who began to make violins for sale when he was 12, and opened a nail-making shop at 14, and made it pay. He attended Yale, then went South, and began work on the gin when a planter's wife suggested that he invent a machine to separate seed from cotton. That he did. As a result, U. S. cotton exports quickly rose from 138,000 to 18 million pounds a year, and production increased apace. However, Whitney lost everything he had made in lawsuits over his invention.

In 1798, he secured Jefferson's aid in making 10,000 muskets for the U. S. Instead of making them by hand he built a machine shop in which more nearly identical parts could be produced than had ever before been available. When, after considerable delay, he had 10 muskets to display, any part of any one of which would fit any other musket, those who came to scoff remained to applaud, the system of interchangeable parts was born, and mass production became a possibility. That also we owe to Eli Whitney.

Ruth Van Deman

Ruth Van Deman, whose father, Henry E., was the Department's first pomologist, and who herself has handled the information work of the Bureau of Human Nutrition and Home Economics, and predecessor organizations, since 1919, died March 6, a cancer victim. Miss Van Deman was nationally known to homemakers by reason of her radio broadcasts, which were a mere facet of a career which made her one of the outstanding women in Federal Government service. A native Kansan, she spent her childhood in Washington, graduated from Smith, took home economics at Columbia, and was assistant editor at N. Y. State College of Agriculture before coming to the USDA in 1919. She wrote many articles for leading farm and women's magazines and was also responsible for all information BHNHE sent out to the public. Her ashes went to Jaffrey, N. H., where she spent her summer vacations. A dynamo of effective activity she packed many more than her chronological 59 years into her life. Instead of flowers she requested that her friends contribute CARE packages, a request in line with her lifelong humanitarianism.

Dark-room fur

UNCLE REMUS might have told of how Br'er Fox was like a chrysanthemum. Such a tale would be truthful, according to one of the latest discoveries in scientific fox farming, by USDA specialists at the Fur Animal Experiment Station, Saratoga, N. Y. The date of prime quality in fox furs can be advanced a month or more by depriving fox pups of late afternoon sunlight in late summer and early fall.

Years ago our plant scientists discovered that chrysanthemums could be forced to bloom in advance of their natural schedule by "shortening the day"—that is, by shading the plant with black cloth, covering it with a box, or moving it into a darkroom, on a schedule which corresponded to the shortened daylight hours of autumn, its normal period of bloom. Bloom could be retarded by giving the plants added hours of light by electricity. Commercial florists made use of this discovery in forcing earlier blooming of late-flowering varieties that were naturally too late for the big football-game market for 'mums.

Now our fox breeders have found that the "primeness" of fox skins—the stage when they are at best market quality—is influenced by light exposure. Fox fur is normally "prime" in December. But by depriving the foxes of some natural daylight, by herding them into a darkened shed before sunset in the late summer and early fall—in imitation of what the hours will actually be about 2 months later—the fur becomes prime by late September or early October. Thus Br'er Fox blooms like a chrysanthemum. Commercial application of the findings is being studied further at the Station.

Secretaries

A London doctor complains in the British *Lancet*: "Why can't I get a secretary like other people's? The contrast between the orderly lines of well-spaced type from my correspondents and the irregular margins, spelling of dame-school standard, and plentiful use of the capital X to which I put my name distresses me daily. When I interview a secretary (and the turn-over is rapid) I am ploughed from the start; the ordeal is far worse than any at Queen Square. They all wear their best clothes, smile toothily, and talk of 'speeds' which sound astronomical to me. I refuse to have the one whose perfume drives me to open the window or the one who looks as if she had slept in a wet ditch for several nights. I want the average one who can type a letter without more than 10 percent of all errors combined; who knows your address, Mr. Editor, and the time of the last train to London; who keeps enough paper off my desk to enable me to see a few square inches of wood. A few kind words of advice from the personnel selection experts will be welcome; something like the points of a horse. (I shall have to type this myself or the whole business will start over again.)"

Mistakes again

USDA's item "Do Mistakes Pay," page 3, February 16, stirred up a little comment. One supervisor wrote in a resounding NO; mistakes should not be made. But a farm journal editor who was interested by the item wrote of a Chinese who cautioned public speakers always to make an easily recognizable mistake in some statement because that would engage the attention of the audience who would then be bent attentively upon correcting him further. Then someone else informed us that writers of advertising know you must never make a negative statement, as three-quarters of your readers will read and remember it as a positive. If you advertise: Our product has no bad odor, people who read that will then be sure your product st— well, is not perfumed. So also, if you state or illustrate the wrong way of doing something in a farm bulletin, like as not many of your readers will seize upon it and use it, thinking it the right way.

Our names

Insofar as the current Washington telephone directory goes we have only three Farmers in USDA—one each in REA, PMA, and the Office of the Administrator of the Research and Marketing Act. There is a Herder in PMA and a Harrow in the South Building, though the latter actually works with Food and Drug Administration. We have two or three Forests and at least one Forrester. There are 14 Barnes, 7 Shepherds (Shepard, Sheppard, and Shephard included), plentiful Greens and Greenes—and even one Greenbank, and abundant Hayes (but only one Hays). We also have—there goes the telephone!

The USDA and YOU

Office of Personnel has issued a "Guide to Broader Understanding and Better Public Service for USDA Employees." It runs 45 pages, about the size of the one you are now reading, but of far heavier paper, and consists mostly of charts. Briefly and clearly it covers the history of the Department, the origin and functions of each of its agencies, and concludes with 10 pages of useful information and suggestions for all of us employees. To see or get your copy apply through your own agency and personnel channels. This is worth the effort, believe us.

So you're not mentioned?

Every now and then someone writes in to commend USDA but adds: I never see anything in it about the SCS in Tennessee—or words to that effect. Well, that's because they didn't send anything in. Any group, laboratory, agency, or office, field or in Washington, that wishes mention in USDA should send in an item now and then. How about it?

Marshall resigns

James H. Marshall, Director of the Sugar Branch, Production and Marketing Administration, has resigned to accept a position in private industry; his successor is Lawrence Myers, his former associate. Marshall, a native of Tennessee, educated there and in California, has served as Director since June 1946, and was associated with USDA and the CCC for a decade before that. Myers, a native of Iowa, educated at Iowa State and University of Minnesota, has served in a number of USDA agencies on economic problems and price-support programs and, before he became Associate Director of the Sugar Branch, June 1946, was an Assistant to the Secretary of Agriculture.

USDA: April 12, 1948

Breeding resistant insects

If interested in details on work of Arthur W. Lindquist, H. G. Wilson, and J. B. Gahan, of the Bureau of Entomology and Plant Quarantine, on the breeding of houseflies resistant to a number of insecticides, read their own accounts of this in Science for March 12, in two consecutive articles. The tests showed that the method of selection from resistant individuals developed an unusually strong stock of flies, rather than one having a specific resistance to DDT, as originally surmised. The authors say: "In view of the increasing use of DDT sprays for housefly and mosquito control, it seems possible that, in time, a similar increase in resistance may occur under natural conditions."

Doyle becomes dean

The appointment of Associate Solicitor James A. Doyle as Dean of the Creighton University School of Law, Omaha, Nebr., has been announced. He will assume his new duties in June. The Creighton Law School is a member of the Association of American Law Schools and fully approved by the American Bar Association. Mr. Doyle, a native Nebraskan, holds degrees of Ph. B. from Creighton, LL. B. from Nebraska, and LL. M. from Harvard. In 1936 he joined the faculty of the University of Nebraska as Professor of Law. In 1943, he was granted a leave of absence to become Regional Attorney at Lincoln. The following year he assumed charge of the Chicago Regional Office, and in 1945, he transferred to Washington as Associate Solicitor.

Poet's corner

Three USDA poets have verses that do credit to themselves and the Department in the new book: "Poetry from the Potomac," an anthology of verse by The Federal Poets of Washington, D. C.; the price is \$3 and the book will be on sale in the book stores soon. The poets are Mildred Walters, Bureau of Human Nutrition and Home Economics, Marion Drown, Agricultural Research Administration, and Mary Smith, Office of Information. Miss Walters first learned of the Federal poetry group from a note in USDA. It meets twice monthly and has fun studying techniques and discussing verses. Additional members who can qualify by presenting some of their own work are always welcome. Sponsor of the group is Eames MacVeagh of the Department of Commerce. Is there anything like this going on in the field?

Marketing careers

The strong emphasis Congress placed upon marketing when it passed the Research and Marketing Act of 1946 is reflected by a demand—in both State and Federal work—for more persons trained in marketing than can be found. This has already resulted in a meeting of Federal-State workers in Washington to discuss college and university courses, and in-service training, as adjuncts to securing the 700 trained men and women that will be required in each of the next five years. If you want more details, write T. Swann Harding, Office of Information, USDA, and ask for No. 547 and also for the February 6 statement by Administrator Meyer, RMA, entitled "Careers in Agricultural Marketing."

Weed killers

For detailed information and precautions about the use of 2,4-D in eradicating weeds write Press Service, USDA, and ask for No. 535.

Seaman A. Knapp

Columbia University Press will issue a second edition of Dr. Joseph Cannon Bailey's book on Seaman A. Knapp, teacher, plant explorer, agricultural statesman, and father of the Extension Service.

Author Weinfeld

Abraham C. Weinfeld, Commodity Credit Division, Office of the Solicitor, is author of an article in the January 8 issue of the Temple Law Quarterly, entitled "Eminent Domain Among Peoples—A Jewish State in Palestine and Arab Self-Determination."

Insect enemies

For arrangement, content, and ready usability we highly recommend USDA's Miscellaneous Publication No. 626, Handbook on Insect Enemies of Flowers and Shrubs. Use as directed and you will not be disappointed. Covers general plant pests, insects that attack specific plants, insecticides and how to use them. It supersedes Farmers' Bulletin No. 1495 and is for sale, at 35 cents, by Superintendent of Documents, Government Printing Office, Washington 25, D. C.

Raw facts

If you want quickly to ascertain the facts about the foot-and-mouth disease eradication campaign in Mexico and grazing control in the National Forests, be sure to get Secretary Anderson's straight-from-the-shoulder talk, "Let's Face the Facts," delivered in his home city, Albuquerque, on March 8. Write Press Service, USDA, Washington 25, D. C., and ask for No. 476.

Free seed

Every once in a while citizens who appear to be alert and well informed write in to the USDA for free seed. For their and your information the Department ceased distributing free seed June 30, 1923. Requests arriving this year are therefore a quarter of a century too late.

Cheese

Cheese Quality Improvement Influenced by Technology, by George P. Sanders, Bureau of Dairy Industry, in Food Industries (vol. 20, pp. 26-31; 144 and 146) is an excellent and quite complete review of work in this field and deserves your close reading, if interested. It deals with control and use of fermentation processes and other techniques developed largely in BDI which contribute to improved quality and simplified processing. Write Sanders in BDI, USDA, for reprints.

90 years young

That aptly describes Liberty Hyde Bailey of Ithaca and Cornell, who was active and prominent before he became a member of Theodore Roosevelt's Rural Life Conference. The world's foremost plant scientist is ageless and timeless—still taking long-distance solo trips to many regions other botanists avoid. He covered 6,000 miles of Mexican wilderness in 17 days, in 1943; more recently he has flown to the West Indies and the Amazon Basin; he now plans a plane trip to Africa and is saving the easy trips until he gets old. He has written and edited more than a hundred books, of which The Holy Earth is probably most widely known. He is currently seeking tropical palm specimens in the West Indies, so his ninetieth birthday will be celebrated just one month late, April 29, after his return to Ithaca.

Board from straw

You have heard about the man who tried to make bricks without straw. Circular 762 from the Northern Regional Research Laboratory, Peoria, Ill., will tell you how to make insulating board with straw. It suggests the development of a process for producing sheathing board in 4 by 4-foot panels from wheat straw, utilizing a small rural plant which would employ about 11 men and turn out 4,500 square feet of the board daily. Press Release No. 575 digests the idea and its possibilities: Circular 762 may be procured from the laboratory in Peoria.

Migratory bees

Bees run about 3,500 to the pound package and the prospective 1948 crop is 6 billion bee babies, a week old but raring to get to work when they reach their new northern homes, whither they are shipped from southern climes where they are born. Nearly 1.5 million pound packages of bee babies will travel this year by fast express, air express, or motor-truck, some primarily to pollinate fruit trees in northern orchards. Packaged bees travel in wire cases and are periodically sprayed en route with thin sugar solution to provide nourishment. Most packages contain a laying queen, but many really high-class queens travel separately, in state, with a dozen or more nurse bees in attendance to feed Her Royal Highness soft sugar fondant. More than a million queen bees are shipped annually.

Chestnuts return

It is believed that within another half century chestnut forests may again cover the eastern United States and Canada. And this will be due in large part to efforts by the USDA and certain State agricultural experiment stations. Cross-breeding blight-resistant Chinese varieties with our diminishing stocks has produced results. Progress is slow, but some trees are becoming available for replanting; these are well distributed in farm woodlots the country over. Today there are only a few hardy old American chestnuts left to furnish pollen for breeding. The blight which killed off our chestnuts supposedly came from Japan about 1880. The Chinese trees produce larger nuts than the American, but the American trees are better for lumber; they are bigger and have better winter resistance.

Rice

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USDA

FOR APRIL 26, 1948

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Thus good comes out of so potentially destructive a force as atomic energy. Possibly radioactivity accounts for phenomena of plant growth in some cases attributed hitherto to other causes. Possibly radioactive materials can be used to speed genetic research, enabling us to develop at will high-yielding disease-resistant varieties of plants, or soil bacteria and micro-organisms which will best promote crop growth. Who knows? The future of this intricate and unusual experiment is boundless.

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THE U. S. TREASURY is gainer by several millions in income-tax recoveries purely as a byproduct of the work of Commodity Exchange Authority in spotting and reporting the frequency of left-open futures accounts—many of them large, and most of them not in violation of the Commodity Exchange Act. But it excited suspicion when so many traders, instead of accepting their customary close-out statements, specifically instructed their brokers to leave their accounts open—long enough for their short-term, fully taxable profits to be reported to Internal Revenue as long-term capital gains taxable at a far lower level. Similar bookkeeping jugglery also enabled other traders to convert handsome profits into fictitious loss items—for tax purposes only. CAE reported this black magic of the market to Internal Revenue.

Secretary Anderson went further. On December 3, he released the CEA findings to the press, pointed out the fictitious character of the left-open accounts, and said they sullied the legitimate services of the markets, whether in violation of the law or not. Exchange officials saw the point. Tax dodgers are undesirable commodity customers. Said the Wall Street Journal, January 8, "Prominent and far-seeing members of the financial community agree that Secretary Anderson has performed both a service to the public and to that community." Treasury officials made the most of the situation and, on March 8, instructed the collectors to go right after taxes on unreported profits. They also recommended a slight revision of the tax laws to Congress, just to be sure. By a conservative estimate, \$5,000,000 in unpaid taxes should be recovered, *sufficient to cover CAE's operations for the past decade.*

Bees run about 3,500 to the pound package and the prospective 1948 crop is 6 billion bee babies, a week old but raring to get to work when they reach their new northern homes, whither they are shipped from southern climes where they are born. Nearly 1.5 million pound packages of bee babies will travel this year by fast express, air express, or motor-truck, some primarily to pollinate fruit trees in northern orchards. Packaged bees travel in wire cages and are periodically sprayed en route with thin sugar solution to provide nourishment. Most packages contain a laying queen, but many really high-class queens travel separately, in state, with a dozen or more nurse bees in attendance to feed Her Royal Highness soft sugar fondant. More than a million queen bees are shipped annually.

Chestnuts return

It is believed that within another half century chestnut forests may again cover the eastern United States and Canada. And this will be due in large part to efforts by the USDA and certain State agricultural experiment stations. Cross-breeding blight-resistant Chinese varieties with our diminishing stocks has produced results. Progress is slow, but some trees are becoming available for replanting; these are well distributed in farm woodlots the country over. Today there are only a few hardy old American chestnuts left to furnish pollen for breeding. The blight which killed off our chestnuts supposedly came from Japan about 1880. The Chinese trees produce larger nuts than the American, but the American trees are better for lumber; they are bigger and have better winter resistance.

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Your pay

NEARLY 50 different bills providing raises in pay for Federal employees have been presented to this session of Congress. One involves a basic revision of the Classification Act, and has had serious consideration. As introduced in the Senate, it would eliminate all present grades and services, and consolidate them into 11 new grades of which grade 3, for instance, would replace the present SP's 3 and 4, CAF's 2 and 3, and CPC's 4 and 5, while the new grade 7 would replace P-4 and CAF's 10 and 11. Passage of this bill would involve average salary increases of about \$500 annually.

According to the Department of Labor, Government workers' salaries bought less in 1947 than in either 1946 or 1939, despite upward revision in basic scales in 1945 and 1946. From August 1939 to August 1947, average annual salaries of all classified employees increased by about one-third, while prices in large cities rose just a little short of two-thirds. But, by December 1947, that two-thirds had become 69.4 percent. After the latest major salary adjustment, July 1946, 6 out of every 10 classified Federal workers received basic annual pay of less than \$2,600, and about a sixth of all had less than \$2,000 a year.

Net spendable earnings available to a Federal-worker family of four, after deductions for income tax and retirement, and adjustment for rising consumer prices, represented buying power of \$1,569 in October 1947, as compared with \$2,065 for August 1939. The respective figures for single persons were \$1,396 and \$2,032. This is based on average gross annual earnings of \$2,856. Wages in private industry meanwhile increased much more than in Government. In July 1946, average gross weekly earnings in manufacturing were 82.5 percent higher (112 percent higher in September 1947) than in August 1939, the period during which Government workers' pay advanced only 33½ percent.

Last-minute notation: At this writing the Senate Civil Service Committee has approved an annual raise of approximately \$490 to \$550, removing the \$10,000 ceiling. The House Civil Service Committee has approved a flat increase of \$468 annually for nonpostal and \$585 for postal workers, effective May 1, 1948, until June 30, 1949. Moreover, Speaker Martin recently requested that all action on Federal worker pay raises be deferred until it has been determined how much the European aid and the defense programs will cost.

The supervisor

WE ONCE worked under a supervisor—let's call him a boss for short—who was as near ideal as they come. It was an interlude of calm and security we shall never forget. During an entire period of very close association with him we never knew him to appear perplexed, irritable, or frightened. He was always calm, in complete command of himself, and unafraid. He did his duty, and far more, with conscientiousness, lively humor, and high efficiency. He satisfied both his own superiors and those under his supervision. Invariably good-humored, he laughed at nasty letters or remarks, and never blew his top. But he was no push-over. He had a mind of his own. He knew what he wanted, and he got results.

The ability never to blow his top appealed to us so that we often asked him about it. Did he get irritated, confused, or afraid at times, and just hold on to himself—or what? He would reply always: "There is nothing in life, nothing at all, worth blowing your top over." Come to think of it, that is true. If you do your duty industriously, conscientiously, the very best you can, there is nothing to fear. If you curb indecision, you avoid most perplexities. If you know your own mind and make it and your plans clear to your subordinates, and heed their suggestions in a friendly manner, there is no need for confusion or misunderstanding. Above all, your health is worth far more to you than the joy of blowing your top.

Finally, nothing is more comforting and reassuring to those you supervise than to feel that you are always placid, unafraid, and capable of dealing with situations as they arise without ever having to blow your top. Let the other fellow blow his while you stay calm. You'll be surprised what an almost unfair advantage this will give you!

New information technique

A new informational technique was recently introduced by Lester A. Schlup, Chief, Division of Extension Information. Mr. Schlup combined his spoken remarks and visual charts on the right kind of publicity for home demonstration work, with slides and tape voice recording. This made it possible for State leaders to hear what informational and other leaders, including Secretary Anderson, had to say while their portraits were projected on slides. State leaders saw the possibility of getting similar recordings and slides of their Governors, college presidents, and State Directors of Extension for use in holding meetings. Lester Schlup's presentation demonstrated that we have by no means exhausted the possibilities of modern informational devices, provided we put our imagination to work.

Brief but important

Balance sheet

The Balance Sheet of Agriculture for 1947, Miscellaneous Publication No. 642, has appeared from Bureau of Agricultural Economics. It is the third in a series of annual reports designed to carry forward the comparative balance sheet of agriculture in the USA. It deals with physical and financial assets, liabilities and equities, and farm income, and interprets balance-sheet gains.

Foot-and-mouth

Current material on the foot-and-mouth disease eradication campaign in Mexico will be found in No. 593, issued by Press Service, USDA. It deals with pushing back the quarantine line, construction of a 90-mile section of fence, and the vaccination and slaughter programs, as of March 18. Write Press Service for this release.

Nematode nemesis

Tests carried out in Utah during the past season by USDA scientists cooperating with those of the Amalgamated Sugar Co., demonstrated that soil fumigation promotes the growth of successive beet crops, and makes it unnecessary to rotate with resistant, less profitable crops to starve out the sugar beet nematode. In fact, fumigation makes the difference between big yields and no crops at all. You will find details about costs, results, and the chemicals used in release No. 583; write Press Service, USDA for a copy.

Personnel testing

Harvard Business Review for March, available from Library, contains a thoughtful article on personnel testing, by Lewis B. Ward, director of admissions, Harvard Business School. He warns against climbing on the "psychological bandwagon" without first closely examining the pros and cons of various testing programs. Better hunt this one up if interested in the subject.

Battle of nerves

The Federation of American Societies for Experimental Biology staged a minor battle at their March meeting in Atlantic City, over how nerves work. New investigations revealed that the nerve is not wholly like a telegraph line carrying electrical signals, but more like an electric transmission line carrying power, and a nutrient highway over which supplies of nutrient material—and perhaps even disease-causing viruses—are transported. The old picture of nerves as inactive except when transmitting a signal was thus changed. If such transmission of viruses occurs in nerves, as Dr. Otto H. Schmitt of the University of Minnesota held, part of the mystery as to how infantile paralysis invades the body will be solved. Adherents of the purely electrical theory of nerve action naturally upheld their side of the argument which both sides won, as both claimed victory.

Art of life

Said Henri Frederic Amiel in his Private Journal: "The art of life consists in uniting continuity with innovation, persistence with progress, identity with change. We should imitate time, which transforms our faces, but gradually, in such a way that they are the same yet become different. A well-regulated existence ought to combine in its tissue one or two constants with three or four variables."

Readability

In the February 21 issue of Editor and Publisher you will find something about what Dr. Rudolf Flesch's famous formula—now revised and telescoped—is doing for Associated Press writers. In this article you will find the set of readability factors used in the new Flesch formula. Extension Service pioneered in prepublication use of the old formula, in 1942. Dr. Flesch is permitting Ext. to make prepublication distribution of his new formula. For a copy, address Readability Unit, Division of Field Studies and Training, Extension Service, USDA, Washington 25, D. C.

Too many typewriters

The House Appropriations Committee Report on the Treasury-Post Office Appropriation Bill for 1949 forbids the purchase of any typewriters during that fiscal year. The report also says: "The Government now has a staggering number of typewriters on hand. As of August 1947 the Federal Government had approximately 1 typewriter for each 2.5 Federal employees, and has approximately 3.6 typewriters for each of the stenographers, typists, and correspondence clerks employed." There were also nearly 15,000 electric typewriters on hand as of August 15, 1947.

Fowl lymphomatosis

Under the title "Genetic Control of Lymphomatosis in the Fowl," the Journal of the American Medical Association for January 31, editorially discussed the fourth annual report of USDA's Regional Poultry Research Laboratory at East Lansing, Mich., and recent work by Hutt and Cole on genetic control of this ailment to which no human neoplastic disease is comparable.

Readable writing

The formal, dignified, and strictly accurate form in which facts must be presented often seems to make Government releases lack flavor and readability. But our main idea is to provide a good news lead and to give the unvarnished facts accurately and concisely. Furthermore, no story could be written here which would suit everyone for every purpose everywhere. But if we get out an austere release about a new process developed in our laboratories for producing fine paper from wheat straw, we are delighted when the Associated Press writer starts his story by saying: "It may not be long before you are writing that love note on wheat straw." It remains the job of the information specialist to provide the brief and unadorned factual story; it is the job of outside writers and reporters to add their own flavor and develop the particular slant or kick they desire for the specific purpose.

Information about USDA

USDA makes available to its readers the following mimeographed documents. Please, if possible, send in written orders for them, whether you are in Washington or in the field, addressing T. Swann Harding, Office of Information, USDA, Washington 25, D. C. Just order the documents you want by number. Be sure to mention your agency: No. 1—Origin, Structure, and Functions of the USDA, March 1, 1948, and the only available publication on this subject. No. 2—Abridged List of Federal Laws Applicable to Agriculture (Including Reference to Former Functions), January 1, 1948. No. 3—Biographies of Persons in Charge of Federal Agricultural Work, 1836 to Date, October 28, 1947. No. 4—Condensed History of the USDA, April 15, 1948. No. 5—Our Department Scientists; is not revised. No. 6—Important Recent Achievements of USDA Scientists, January 1, 1948. If you must phone, call Miss Arden, Ext. 4649; she is in room 535A.

USDA: April 26, 1948

Polymyxin

Remember when the new antibiotic produced by a soil bacillus and called polymyxin is mentioned in the news that two scientists at our Northern Regional Research Laboratory, Drs. R. G. Benedict and A. F. Langlykke, were codiscoverers of it with Dr. Harold White, an associate of the American Cyanamid Co. It is under trial at Johns Hopkins and seems really to be doing things against whooping cough, undulant fever, and several other diseases, not to mention Friedlander's bacillus.

Peacetime activities

Forest Service reports a big postwar increase in hunting and fishing in its National Forests. For more detail write Press Service, USDA, for No. 605.

Coffee time

A recent survey made by the National Society of In-Plant Feeding Engineers found that 58,000 workers who pause for coffee during the morning and afternoon rest periods were 21 percent more efficient than those who work straight through! (Note.—Now don't get the idea that two pauses for coffee morning and afternoon will make you 42 percent more efficient; the report didn't say that!)

"Official clichés"

That, naturally, is the British term for office jargon or the language of bureaucracy, and an eradication program is on in London. Said Glenvil Hall of the Treasury to the House of Commons: "The letters which a department sends out are the shop windows of democracy, and it should see that they are couched in simple, straight-forward, friendly English." In other words, say "No houses have been built for 5 years" instead of "There has been a cessation of house-building operation for over a period of 5 years." A ponderously phrased document was put in evidence on the margin of which Winston Churchill had written, "This is nonsense, up with which I will not put." It was announced that the meaning of "The matter is under active consideration" is "We lost the file," for a matter cannot be considered inactively. Finally, a member commented that the reformers themselves should not speak of "a serious effort to improve our expressions" but should say: "We shall try to speak and write more simply!"

Crime

The current loyalty investigation has shown that a fairly consistent ratio of 8.5 percent of Government workers apparently have been lawbreakers, but their files reflect no disloyalty information in 99 percent of the cases. Our past crimes run to felonies, according to the FBI, and there are very few misdemeanors. So vast is the investigatory job that every FBI agent carries an average load of 17 cases at a time.

Better safe than sorry

For the fifth consecutive year National Farm Safety Week will again be observed July 25 to 31, inclusive. This Week, sponsored jointly by the National Safety Council and USDA, has been wholeheartedly endorsed by farm organizations and farm leaders throughout the country. The theme of this year's observance, to be highlighted by the Presidential Proclamation, will be a drive to eliminate 30,000,000 farm hazards during the Week and during every week in the year. John H. Wetzel, SCS Safety Engineer, is Chairman of the National Committee planning and directing the Week, and the USDA Safety Council will head up the Department program.

SCIENTISTS AT WORK

USDA Document No. 6, Important Recent Achievements of Department of Agriculture Scientists, dated January 1, is again in good supply. Get your copy to find out what research workers in ARA, SCS, FS, BAE, FCA, and PMA have been doing recently. Contains brief, varied items in popular style. For copies write T. Swann Harding, Office of Information, USDA, Washington 25, D. C., or phone Miss Arden, X-4649.

Buying eggs

Because eggs sell by the dozen, housewives are hard put to it to compare them with other protein foods, like meat, fish, and cheese, which sell by the pound. A dozen large-size eggs are equivalent to 1½ pounds of meat, as an alternate food. Priced at 60 cents a dozen, eggs would furnish protein food at 40 cents a pound; their shells weigh little as compared with the bones and other waste in many meats. Extra large eggs weigh at least 27 ounces per dozen, large eggs at least 24, medium eggs 20, and small or pullet eggs, 18. Maybe that will help you figure when you go egg buying.

Weaker preharvest spray

That 2, 4-D may supplant naphthaleneacetic acid as a preharvest spray to retard fruit drop in Bartlett pears, is indicated by the results of a recent study in the Pacific Northwest. Dr. L. P. Batjer of USDA reports that, in a 3-year comparison at Wenatchee, Wash., a weak solution of 2, 4-D proved as effective as and less expensive than the standard sprays of naphthaleneacetic acid now used. Evidence shows also that the standard sprays are stronger than needed to retard fruit drop in Bartletts. Furthermore, the standard spray may cause slight injury to foliage and directly stimulate maturity in fruit. A weaker solution of naphthaleneacetic acid gave practically the same effect in retarding drop and did not injure foliage or hasten the ripening of the fruit.

Apple favorites

Commercial apple production last year exceeded 112 million bushels, with Delicious, at 24,418,000 bushels, far in the lead of Winesap at 11,868,000, which was followed by Jonathan's 8,407,000 bushels, with Rome Beauty—6,734,000, and Baldwin—5,134,000 bushels, trailing. No other variety made the 5-million mark, though Stayman and York Imperial hit that in 1946, but Baldwin did not. Delicious is the over-all favorite, three-quarters of the 1947 crop having been grown in Washington, which State also grew 3 out of every 10 bushels of the commercial apple crop of all varieties.

Smokejumper train

Smokejumper train take a 2-week refresher course every season; this puts experienced men in trim, though it takes twice as long for the inexperienced. Smokejumper train are hand-picked, most of them are veterans, and the only definite recruiting effort is among college students majoring in forestry who, however, must first have had ground experience in the woods. In 1947 Forest Service's parachute unit set a new record in dropping 75 smokejumper train to a single serious fire in Flathead National Forest, but 2-man crews handle most of the fires.

RMA poultry projects

A report has been issued on the poultry projects now underway under the Research and Marketing Act of 1946. If interested write Press Service, USDA, and ask for No. 616, dated March 23.

Ginning lab

Construction of a new laboratory for intensive ginning research on irrigated cotton has been authorized under the Research and Marketing Act. It will be erected at New Mexico A. & M. College and will operate as a branch of the Stoneville, Miss., ginning lab.

Twentieth-century atom

If you would like to become a little more acquainted with the twentieth-century atom, with isotopes and the curious activities of the Atomic Energy Commission's unique factories—where raw materials enter by the ton and the output emerges by the teaspoonful—you should read "The Business Side of the Atom," an address delivered recently by Chairman David E. Lilienthal of AEC. It is popularly, even entertainingly, written and highly informative, though it does not contain a great deal of strictly agricultural matter. For a copy write T. Swann Harding, Office of Information, USDA, Washington 25, D. C.

Dr. Frame

Dr. Nat T. Frame, Director of Extension Work in West Virginia from 1919 to 1933, died Monday, March 22, after suffering a heart attack. Dr. Frame had collapsed on his return from an automobile ride, dying a short time later. He was 71 years of age. In addition to serving as West Virginia's director, Nat Frame is widely known for the part he played in the organization of 4-H Club work, and the outstanding contributions he made to the country life movement. In his early extension days, Dr. Frame emphasized the integrated educational approach, looking at family and community together.

Norman F. Childers

Dr. Childers, formerly assistant director and senior plant physiologist at USDA Agricultural Experiment Station, Mayaguez, P. R., has succeeded M. A. Blake, who died December 14, as Chairman of the Department of Horticulture, New Jersey Agricultural Experiment Station.

To write better

If interested in writing better, *write in* for our "aid-to-better-writing packet"—a mimeographed item on common mistakes in writing which editors have to weed out, and a copy of a manuscript on producing and marketing quality eggs, accompanied by the printed bulletin which editors produced from the manuscript. Address T. Swann Harding, Office of Information, USDA, Washington 25, D. C.

Overweight? Underweight?

If you are either you cannot hope to find more scientifically sound advice more compactly presented than in a 4-page processed leaflet you may secure from the Bureau of Human Nutrition and Home Economics. It is entitled "Consider Your Weight," and you can find both less, and less trustworthy information on the subject in quite large and expensive books. This 4-page "treatise" covers the subject adequately, accurately, and in popular language.

Vox pop

On April 7, as many of you probably know by now, the voices of USDA scientists were picked up on "Vox Pop" from various parts of the Agricultural Research Center, Beltsville, Md.

For YOUR security and the Nation's security buy Security Bonds to the limit of your ability.

The urge to eat

After 9 years of research two scientists recently presented evidence to the American Physiological Society to prove that the urge to eat is primarily an urge to keep warm. The hypothalamus, a pea-sized mass at the base of the brain, regulates bodily heat and controls food intake as well. Animals eat less in hot environments than in cold. Rats, which cannot perspire, were used in the experiments, and they ate less and less as the temperature rose, until at 94° F. they consumed little or no food, but used energy stored up as fat, hence lost weight. At 97° F. they soon lost 10 percent of their body weight; to help out they ran fevers when kept at high environmental temperatures, in order to rid themselves of excess heat.

Nutrition information

Those interested in the dissemination of information on nutrition will find much to ponder in a processed publication from Bureau of Agricultural Economics—Homemakers' Acceptance of Nutrition Information in an Urban Community. It deals with a survey made in Richmond, Va. Only about 4 percent of homemakers interviewed were deemed to have adequate information on nutrition; half had little or no such information. Most got their ideas on food and nutrition from newspapers and magazines; their primary interest being recipes and new dishes. For details get the publication from Economic Information, BAE.

Inspired course

Professor of Government John M. Gaus at Harvard recently wrote Director of Personnel T. Roy Reid of USDA, that the Biloxi Personnel Officers' Conference inspired him to prepare and give a new course on The Civil Service. He wrote: "I was in part stimulated to undertake the new venture because of the inspiration of the meetings at Biloxi, and the opportunity which you so generously gave me of again getting into the atmosphere and interests of so fine a group of public servants."

The tanks are coming

Don't be alarmed. This relates to a new method of growing plants, devised by Dr. E. A. Spessard of Hendrix College in Arkansas. It's hydroponics back again under a new slogan and the tanks are called "hydroponicums." The title above is that of Dr. Spessard's book on the subject. The author claims that his method eliminates poor soils, floods, and drought as enemies of plant growth, shortens the growing season and improves the plant's quality as food. He sees the dawn of a day when all can be well fed by using his contrivances. He has sold his own hydroponic products profitably in local stores. Read the book, but think while you read. Maybe it's all too good to be true.

Water facilities loans

Farmers Home Administration reported recently on its water facilities loans to farmers and ranchers in 17 western States—families which had no other way of financing installations of needed farmstead or irrigation water. Write Press Service, USDA, and ask for No. 509 to get details.

You like rabbits?

If you'd like an economical year-round supply of white, delicately flavored, nutritious meat, comparable to chicken breast, and live where poultry raising is permitted, consider the domestic rabbit. For some details on backyard rabbit-raising, derived from Charles E. Kellogg, who is in charge of USDA rabbit research, write Press Service, USDA, and ask for No. 614.

Dr. A. F. Woods

Dr. Woods, long a distinguished member of USDA's staff and an outstanding scientist and educator in the field of agriculture, died early April 12, at the age of 81, after a 5-month illness. More later.

Prevent accidents!

On March 10, President Truman called Federal Department and Bureau heads together in the White House to urge them to give their wholehearted support to accident prevention in the Federal Government. In 1946, accidents cost the Government \$90,000,000, killed 456 employees and injured 90,000 more. Fires burned up \$21,000,000 worth of Government property. The President called on the top officials to go back and examine their agency safety programs to make certain they were doing everything possible to "put their own house in order." The White House meeting preceded the annual meeting of the Federal Interdepartmental Safety Council at which USDA Director of Personnel T. Roy Reid was elected vice chairman of the council.

Retired

R. H. LYLE SEATON of the Office of Solicitor, retired March 31; he joined the staff of Sol. in 1919, and has served there continuously ever since. . . . FERCY L. E. RICKER, widely known as a taxonomic botanist and for his interest in the conservation of wildflowers, retired from the Bureau of Plant Industry, Soils, and Agricultural Engineering on the same day. He served USDA 46 years, his work on the classification and identification of legumes and economic grasses having been outstanding. He entered USDA September 15, 1901, the same year old BPI was established. He has published 124 papers on forage crops, fungi, and native wildflowers. . . . ALICE ARNOLD, who helped on *USDA* from its very beginning, and whose name first appeared in its masthead as assistant editor in the issue for September 20, 1942 (vol. 1, No. 15), retired in March. Since July 1, 1947, she had been on other assignments in Office of Information, wherein she had served about 20 years.

Liaison officer

Secretary's Memorandum No. 1211, March 25, 1948, announced the appointment of F. B. Northrup, Director Price Support and Foreign Supply Branch, Production and Marketing Administration, as Chief Liaison Officer on European Recovery between USDA and other Government agencies for all matters in connection therewith.

DeWitt C. Wing

The other day while being driven from Peoria to Urbana, Ill., to speak to a USDA Club, we dropped by and saw DeWitt at his home in Normal, Ill. He looked in good fettle, was hard at his gardening, and would appreciate hearing from old friends. Normal, Ill., is sufficient address.

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USDA

FOR MAY 10, 1948

Trigg succeeds Gilmer

JESSE B. GILMER has resigned as Administrator, Production and Marketing Administration, to enter private business. His successor as PMA Administrator and President of Commodity Credit Corporation is Ralph S. Trigg, who has been Deputy Administrator of PMA and Vice President of CCC. In accepting Mr. Gilmer's resignation, which he did "with great reluctance," Secretary Anderson wrote: "You leave with my staunchest good wishes and you will carry with you my assurance that you have done your job, that your honesty of purpose and action has been always above question, and that in the tremendous responsibilities imposed upon you, your Government had profited by having you as its servant."

Mr. Gilmer has served USDA in various capacities since 1934 and, after a period as Deputy Administrator of PMA, he became Acting Administrator, in November 1946, and Administrator the following February, serving also as President of CCC and on the Board of Directors of Federal Crop Insurance Corporation. Mr. Trigg came to the Department in 1946, as Assistant to the Secretary, after having been in the Navy 3½ years, leaving with rank of lieutenant commander. He is a native Texan and a graduate of the University of New Mexico. He became Assistant Administrator of PMA in June 1946, and Deputy Administrator the following February.

Farmers and freight rates

You probably know little about how much the USDA has to do with procuring equitable freight rates for farmers. May we suggest that you read "Freight Rates and Farmers," by Charles B. Bowling, Chief of the Transportation Rates and Services Division, Marketing Facilities Branch, Production and Marketing Administration, which appeared in the March 1948, Agriculture Bulletin, an official and an excellent illustrated publication of the Oregon State Department of Agriculture, Salem, Oreg.

Dr. Woods

DR. ALBERT FRED WOODS, agricultural scientist and educator, long associated with USDA and its Graduate School, died in retirement April 12, after an illness of 5 months. A native of Illinois, he grew up on his father's cattle ranch in Nebraska, and was educated at Nebraska University. He came to USDA as a plant pathologist in 1895, before there was a Bureau of Plant Industry, and did outstanding research. He continued in the work after BPI was created, leaving in 1910 to become Dean of Agriculture at Minnesota until 1917, when he accepted the presidency of Maryland State, where he served until 1926, bringing the school up to a class A rating.

He then returned to USDA as director of scientific work and also became director of our Graduate School. From 1934 until 1938 he was principal pathologist of BPI. He retired as Director of the Graduate School in 1941 and, on December 31, 1946, retired as educational advisor and dean emeritus, after which he devoted himself to research on plant virus diseases. He was a member of many scientific societies and a leader in and delegate to numerous international conferences. Even-tempered, courteous, and entirely friendly and unassuming, he was an inspiration to all who knew him.

Demand for publications

Most of USDA's daily average 3,500 requests for bulletins and information come from women—letters, postals, phone calls, and personal visits included, heaviest demand being for publications on canning, removing stains from clothing, poultry raising, and gardening. Most popular "best seller" for free is "Home Canning of Fruits and Vegetables," of which nearly 7 million copies have been sent out in response to requests. Next in order come "Stain Removal from Fabrics," "Farm Poultry Raising," and "Roses for the Home." Garden publications are in frequent demand. Last year 39,132,941 free publications went out on request, as compared with 84,308,820 in the year of heaviest demand, 1943.

King's English

WE HAVE ALREADY had something to say about the battle of King's English, now being waged in London. More has come to our attention. Britain's Labor Ministers are too circumlocutory for Edward H. Keeling, Conservative member of Parliament. Member Keeling told that august body that "A minister or civil servant who can state simply what he means and what he wants will be far more effective than one who employs pretentious verbosity"—indicating that all the polysyllabic ammunition wasn't on one side anyway.

Keeling quoted a Government paper which declared: "Among the beneficent qualities of sleep, its capacity for withdrawing human consciousness from the contemplation of immediate circumstances may perhaps be accounted not the least remarkable," which, said he, Sir Arthur Quiller-Couch put much better when he wrote "How excellent a thing is sleep! It wraps a man around like a cloak." Then Keeling went on:

Is it really desirable to talk about "unfavorable weather conditions" when we mean "bad weather"? Must everything be in "short supply"? Could it not be "scarce"? Cannot people "work together"? Must they "co-operate in a coordinated manner"? A Minister says he is "prepared to admit," then why not admit it? . . . A Minister will tell you an operation is one of "considerable magnitude" because he thinks this is more likely to be accepted as an excuse than if he says it is a "big job". Or he will say that "considerable practical difficulty militates against my honorable friend's suggestion being put into effect," because he thinks this is more placatory than to say the honorable gentleman's suggestion will not work.

In short, said Mr. Keeling, why say, "If his garment shows minor damage and is capable of reconditioning"—when you mean, "If his trousers are torn and can be mended"? Well, why? Any other horrible examples coming up from readers now?

SECURITY BOND DRIVE

Buy United States Security Bonds to promote the security of the Nation and your own at the same time. Fight inflation, build financial reserves, make America a positive force for peace—

BUY SECURITY BONDS NOW.

DR. FITZGERALD

Dr. Dennis A. FitzGerald, who recently returned to the Department as Director of the Office of Foreign Agricultural Relations, has been named head of the Food Division of the Economic Cooperation Administration. He will continue to give direction to FAR, in view of the close relationship between the work of that agency and ECA.

Sherman's private war

DETAILS OF plant quarantine work are not as dry as the DDT dust used by entomologists in their pest-control operations. This was recently illustrated by a brief report to USDA information workers by Ralph W. Sherman, plant quarantine specialist of the Bureau of Entomology and Plant Quarantine, who carries on a private war against alien insects.

Stories of how some of our undesirable alien insects unwittingly invaded our boundaries have become near-classics. Take the annual 150-mile migration of the Mexican fruitfly from wild mountainous areas of Mexico to the productive Texas citrus-growing area in the Lower Rio Grande Valley; the surreptitious entry of Dutch elm disease and its carrier beetles on seemingly harmless burl elm logs from France destined to midwestern veneer mills; or the Gulf storm, in August 1915, that swept 2,000 bales of pink-boll-worm-infested Mexican seed cotton from the Galveston docks and strewed contaminated cotton along a 20-mile stretch of Texas' Trinity Bay area, establishing there an incipient infestation of this double-barreled pest of cotton and cottonseed, requiring a tedious eradication program to wipe it out. All these illustrate the ever-present problems alerting the Bureau's plant quarantine corps.

Some of Sherman's experiences while acting as the Bureau's trouble-shooter in prosecuting violators of certain domestic quarantines involved unusual sidelights on human nature. In one instance a convicted violator after being fined \$300, altered his reputed night-spot habits so that he might obtain early-morning Japanese beetle inspection for his semi-weekly truckloads of produce. Another notable prosecution involved the late Henry Ford's chauffeur, who arranged for the shipment to Dearborn, Mich., of 7 carloads of topsoil from the site of the late Thomas Edison's original laboratory at Menlo Park, N. J. This cost the Pennsylvania R. R.—it had the quarantine know-how but ignored it—fines totaling \$1,400.

In checking domestic plane travel for Japanese beetles, young women "beetlettes" have been employed at a heavily infested airport. As one passenger put it, "A lady boarding a plane might be embarrassed by being gaped at by a male inspector, but neither sex objects to a comely young lady reaching around one's neck to flick off a marauding beetle." Beetle inspectors at airports last summer intercepted 2,800 Japanese beetles

poised for flight to distant beetleless sections of the country. An effective plant quarantine inspector needs scientific training in entomology and plant pathology and must be adept at dealing with the public. Those working at port inspection also find a knowledge of Spanish and a rugged constitution valuable assets.

Pest Training Table

DEVELOPING CROP resistance to a disease is not just a simple process of finding a plant that will stand up against an individual of that particular disease organism, it must be strongly resistant to very aggressive members of the group. You might say the plants are picked out much as members of an athletic team are selected in competition. An example of current work on development of disease resistance is tobacco breeding in USDA Plant Industry Station greenhouses at Beltsville, Md. Here Dr. E. E. Clayton is trying out various strains of tobacco plants in a search for high resistance to rootknot, a disease caused by attacks of the rootknot nematode, which lives on the roots of many important farm crops and is very damaging to those of tobacco plants.

In the search for high-resistant tobaccos, Dr. Clayton makes sure that the nematodes he has on hand are vigorous enough to break into the roots of any but very resistant plants. During most of the year he keeps the nematodes growing in a greenhouse bench on corn roots, which suit them only moderately. But a few weeks before they are put in soil for testing the tobacco plants, the corn is pulled up and replaced with a crop of squash plants. The squash root has a special appeal for the rootknot nematodes—like porterhouse steak to a football squad. By the time the transfer to the tobacco-plant pots takes place, these husky, though microscopic, nematodes are ready for vigorous attack. Plants that withstand this engineered attack, says Clayton, are sure to have rootknot resistance worth breeding into commercial varieties.

USDA authors

The March 1948 issue of Grain Quarterly, published by the Co-op Grain Publishing Co., of St. Paul, is rich in USDA authors. Among those present are J. M. Mehl (CEA) on The Co-op's Stake in Grain Exchanges; E. R. McIntyre (Inf.) on Grain Sorghums Are Big Yields; Charles B. Bowling (PMA) on The Wheat Farmer Pays the Freight; Leo J. Schaben, (FAR), The Food Grain Plight in Europe; and Wayne Dexter (BAE) on A Farmer Figures What Parity Means. Ex-USDA official Roy F. Hendrickson contributes "Washington Grain Grams."

In spring magazines

BETTER HOMES AND GARDENS for April includes an illustrated article on "Growth-Regulator Chemicals" and what they mean to the gardener, and calls attention to "Growth Regulators," a book written by John W. Mitchell and Paul C. Marth, Bureau of Plant Industry, Soils, and Agricultural Engineering. Seventeen for April asks "How Do You Eat Your Dollars?" and proceeds to give tips on how not to knock the food budget out of kilter. The spring issue of American Fabrics, de luxe publication of the textile industry, includes sheep pictures and statistics from Bureau of Animal Industry's sheep husbandry specialists.

Pathfinder's "Crisis in Figs" reminds us that Government and industry are cooperating on a boost-figs program, to help the Nation's fig farmers market their 33,000-ton crop. If you want to know "The Truth in the Controversy About Fertilizers" read House Beautiful for April, page 126. The author, who interviewed some of the experts in PISAE, explains the value of both compost and commercial fertilizers. Practical Home Economics, in "Protein Aplenty in Poultry," makes use of information from Production and Marketing Administration's Poultry Branch.

Brief but important

Elected by meter

To be a member of the "Kilowatt Club" you have to use a good bit more electric current than most of your neighbors who are members of the Butte Electric Association, with headquarters at Newell, S. Dak. Then you are listed on the club roll in the monthly news leaflet to members of this co-op financed under the Rural Electrification Administration program. This is one of the many devices that co-ops have adopted to encourage use of electricity which benefits both the rural consumer and the co-op. Members read their own meters and calculate their own bills. If they fail to pay promptly—the association has another roll to balance the "Kilowatt Club;" it is the "Dog House Department."

She needs protein!

Dr. Ruth Leverton, Nebraska Agricultural Experiment Station, as a result of her own investigations believes that women generally should change their food habits and eat more protein. This will help maintain their blood hemoglobin at normal.

Long-range farm program

Secretary Anderson's comments on S. 2318, introduced by Sen. Aiken, to provide for a coordinated agricultural program, were made before the Senate Committee on Agriculture and Forestry, April 12; you may procure a copy by writing Press Service for No. 755. This bill was mentioned page 4, *USDA*, April 12.

RMA project summaries

Summaries of research under way on oil-seed crops, and on grain, feed, and seed, under the Research and Marketing Act, have been issued; write Press Service for Nos. 699 and 732 to get details.

Insulation guide

The bright new Miscellaneous Publication 633, *Your Farmhouse . . . Insulation and Weatherproofing*, is a helpful graphic guide to the subject. It was prepared under the direction of Harry L. Garver of the Bureau of Plant Industry, Soils, and Agricultural Engineering.

New movies

Motion Picture Service announces release of two excellent films on forest fire prevention, "It's No Picnic," and an actual documentary account of the 1947 Maine forest fires, which caused about 30 million dollars worth of damage to property and natural resources, entitled "Then It Happened."

Market basket ascension

The latest USDA report on retail food costs places additional emphasis on the need for food conservation as a weapon against high prices. This report charts each month the retail cost of the family "market basket." The basket contains quantities of farm food products equal to the 1935-39 average annual purchases per family of three average consumers. Retail prices of these products rose nearly 2 percent from mid-December to mid-January 1948. Cost of the market basket in December was \$684 and in January \$695. The January figure was 14 percent higher than that of January 1947, and 104 percent higher than the 1935-39 average, which placed a price tag on the market basket of only \$340.

USDA and land-grant colleges

Secretary's Memorandum 1213, April 12, announced a plan of cooperation between the Department and the land-grant colleges and universities to advance research and other experience of qualified graduate students. Under the plan USDA would benefit from the employment of qualified postgraduate students and postdoctorate personnel of the land-grant institutions, while affording such personnel opportunity to gain research and other experience under the direction of the Department's scientific staff. Dr. Rhett Y. Winters, Agricultural Research Administration, was appointed chairman of a Committee on Internship Cooperation with the Department of Agriculture Graduate School and the Land-Grant Institutions to develop suitable procedures for, and to carry forward this co-operative program.

REA is 13

Senator George D. Aiken is the scheduled speaker at Rural Electrification Administration's Thirteenth Anniversary Banquet, May 11. The occasion will be complete with birthday cake and everything.

Flavor in C

Well it isn't "in" C, but the same conditions that produce the finest flavor in strawberries of any variety likewise produce the highest vitamin C content. Recent USDA research shows that full sunshine, long periods of daylight, cool nights, and moderately warm but not overly hot days foster berries of top flavor and ascorbic acid (vitamin C) content.

Knapp of FCA

Dr. J. G. Knapp, a section head in the Co-operative Research and Service Division of Farm Credit Administration since 1934, has become Associate Chief of the Division, primarily concerned with direction of its research activities. He attended Colorado State, the Universities of Illinois, Nebraska, Chicago—and Stanford University, and was a fellow of Stanford's Food Research Institute from 1924 until he joined Brookings' staff in 1926. He has been a specialist in agricultural cooperation for years.

Savage Hall

This is Cornell's new nutrition building, the first of considerable cost and importance devoted to a major school of a land-grant university the erection of which was wholly financed by farmers, for its cost in full, \$650,000, was contributed by appreciative farmers and farm organizations of the Northeast, Cornell donating the site. It will now provide quarters under one roof for Cornell's unique school of nutrition established in 1941 by Dr. L. A. Maynard.

Rural reading tastes

You will find in *Publisher's Weekly* for March 27, a revealing article on rural reading tastes. By and large reading tastes are very similar in small and large communities and, judging by USDA lists of books recommended for rural reading, relatively few are issued by commercial publishers; farmers depend largely on university and government presses. See the article, available from Library, for more details.

Wayward wits

An employee writes from the Great Southwest that this is the part of the country where they toss two buckets of sand over you to revive you if two drops of water happen to hit you during an infrequent shower . . . Another, from Washington, D. C., remarks that the great governmental bureaucracy reminds him of a big log floating down the river bearing a hundred thousand ants each one of which thinks he's steering it.

Pictograms

For some time now the novel manner in which U. S. News & World Report presents data in graphs and pictograms, many of them in color, has appealed to USDA information workers in Washington. The other day the man responsible for them, art editor Derk Fox, came over and talked to a group of information people on how the work is done. Better look over some copies of this weekly, edited by David Lawrence, and get an idea or two. Edited in Washington, it appears from presses at 437 Parker Avenue, Dayton 1, Ohio; our Library gets it too.

Mineral resources

The editor has some copies of a brief summary of the Department of the Interior's report entitled "Mineral Position of the United States." It consists of one mimeographed sheet with a graph attached. If interested in our mineral resources and estimated commercial reserves write T. Swann Harding, Office of Information USDA, Washington 25, D. C., and request a copy.

Long addresses

Experience convinces us that some letterheads used in USDA are confusing and some return addresses given are much longer than necessary. Sometimes we have literally to study the letterheads of incoming mail to see where to send the reply; often a needlessly long and involved return address is given when a much briefer one would meet postal requirements. This leads us to wonder how outsiders view such letterheads and long return addresses. Will they not tend to regard them as just another evidence of blundering bureaucracy?

RMA dairy projects

If you want information on how projects originate under the Research and Marketing Act and regarding the dairy projects active for 1947-48, write Press Service, USDA, and ask for a copy of No. 691.

Typists, scribes, clerks

In Washington, D. C., there are more than 29,000 Federal employees occupying stenographer, typist, and correspondence-clerk jobs under the competitive system, and there are only 21,700 persons in all types of professional, scientific, and technical operations in this city.

Sunless gardens

Dyson Carter has an interesting story in April Science Digest (published from Chicago) entitled "Sunless Gardens Are Here," and dealing largely with certain USDA work at Glenn Dale, Md.

Noted in passing

In April Harper's Magazine, Bernard DeVoto holds forth on the inability of people to read carefully and their strong tendency to write to him asking questions about his writings which are plainly answered right in the articles and books they read. Same thing happens over and over with *USDA* readers too . . . If you get hold of this issue of Harper's don't miss "Back to What Kitchen?", by Ann Leighton, a sort of spirited answer to USDA's magic kitchen and its implications for the family and the home.

Honor Awards

The next USDA Honor Awards Program will be held May 17, right after the Department's Eighty-sixth birthday, May 15, 1948. The names of individuals and groups receiving the awards, and their citations, will appear in the 8-page issue of *USDA* for May 24. Meanwhile, Secretary Krug of Interior announced, April 9, that his Department was initiating an honor award plan. In Interior there will be Distinguished, Meritorious, and Commendable Service Awards, with appropriate certificates, citations, and gold, silver, and bronze medals.

E. M. Norton

E. M. Norton has become Assistant Director of the Dairy Branch, Production and Marketing Administration, with responsibility for coordinating and supervising the activities of its Purchase and Sales, Inspection and Grading, and Market News Divisions. Mr. Norton has had 13 years' experience with USDA. Don Anderson, Assistant Director, will be responsible for the Manufactured Dairy Products and Research and Analysis Divisions. H. L. Forest has been Acting Director during the illness of Director S. W. Tator.

Norris S. Rich

Mr. Rich, chauffeur to the Secretary of Agriculture, and a native Washingtonian, died April 4, as a result of a heart attack. He had served since February 1941. Secretary Anderson and his Assistant, Wm. A. Minor, attended the funeral, where the Secretary spoke praising Rich's dependability, industry, courtesy, and helpfulness. "I am glad to have been associated with this fine man," said the Secretary. The editor agrees, from personal experience, for on one occasion known to him Norris Rich threw off his coat and generously went to work on a lady's stalled car standing in front of one of the Department buildings, and soon had it running. He had no slightest obligation to do this for a total stranger; he just did it because that's the kind of man he was, through and through, and all who knew him knew this.

Feeding the world

Better look up "The Country That Can Feed the World" by Fairfield Osborn, in the Atlantic Monthly for April. President Osborn of the New York Zoological Society is leading the drive for conservation on a national scale, and he has some very pertinent things to say of prime interest to us in USDA. Little, Brown publishes his new book, "Our Plundered Planet," this spring. . . . While you are reading this copy of the Atlantic treat yourself also to farmer-novelist Louis Bromfield's amusing whimsy "Sylvester the Bull."

Spell names correctly

Some time ago USDA called attention to the careless habit, so prevalent in many offices, of spelling the names of addressees incorrectly on memoranda and in letters. Nothing creates a worse impression on the recipient of a written communication than to observe that his name amounted to so little in the writer's estimation that it was not worth while to spell it correctly. Create good will by spelling correctly the names of the people you address, whether they work in or outside USDA.

Atomic energy

We have another interesting, readable, and popularly informative speech from the Atomic Energy Commission. It was delivered by Commissioner W. W. Waymack and was entitled "Atomic Energy: How and What?" It is not filled with technical material about the nature of isotopes, though it does give a very popular account of the rise and evolution of the atomic theory, and a chronology of intra-atomic developments. Then it turns to atomic energy—where it is generated, and how we may eventually be likely to use it. To get a copy write, please do not phone. T. Swann Harding, Office of Information, USDA, Washington 25, D. C.

Ag Research Center

"The Agricultural Research Center of the U. S. D. A., An Account of the Activities at the Department's Largest Research Station, at Beltsville, Md.," is the general title of a recently revised (January 1948) processed publication from Agricultural Research Administration, USDA. It does much more than tell about activities, however. It tells also how to get to the Center, what is there after you get there, where it is located, and whom to see. It also includes a brief account of the Center's origin. The booklet is designed not only as an aid to visitors, but to provide information to persons unable to go to the Center but who wish to know about it. Ask ARA, USDA, for a copy, if this includes you.

Cottrell

Dr. Frederick Gardner Cottrell's remarkable career was the subject of a recent article by Harland Manchester in Argosy, which Reader's Digest boiled down. When young, Cottrell invented "the cottrell," which precipitates the particles out of smoke or other fine dispersions of solid matter. He set up the nonprofit Research Corporation, after taking only a modest sum annually for himself from his widely used invention. The corporation, among other things, partly backed E. O. Lawrence's cyclotron for years; supplied \$125,000 to Morris Kharasch, head of organic chemistry at University of Chicago; aided the work of Edwin J. Cohn and assistants on blood at Harvard, and helped many other projects. Cottrell himself had a brilliant career in the Bureau of Mines and also in USDA's old Fixed Nitrogen Laboratory where, among others, Director G. E. Hilbert of the Northern Regional Research Laboratory trained and worked. Cottrell now lives in active retirement at Palo Alto, Calif., sparkling new, valuable, and arresting ideas on the slightest provocation as readily as ever. He is now 71.

Joseph E. Cagle

Mr. Cagle, President of the Federal Intermediate Credit Bank of Columbia, S. C., since 1933, and associated with farm credit work since 1929, died March 22.

4-H Club Camp

The Eighteenth National 4-H Club Camp will be held in Washington, D. C., June 16-23, the theme being "Creating better homes today for a more responsible citizenship tomorrow." Extension Service, USDA, will supply further details.

Co-ops and law

Lyman S. Hulbert's (Office of the Solicitor) article on "Cooperative Principles and the Law," was published by the corporation section of the American Bar Association and distributed to several thousand lawyers identified therewith.

Agriculture in U. S. S. R.

Those interested in mechanized farming in Russia will find much in Lazar Volin's article on "Machine-Tractor Stations in Soviet Russia," which appears in April Foreign Agriculture, issued by our Office of Foreign Agricultural Relations.

Look! No soil!

Read the article on Growing Plants Without Soil, Scientific Monthly for April 1948, prepared by Neil W. Stuart of Plant Industry Station, Beltsville, Md., for authentic appraisal of the method's possibilities. The article, which leads off this issue of the magazine, is well illustrated and documented.

Air blitz

The spring offensive in the 1948 battle between the people of New York State and the gypsy moth opened April 15, near Albany. This devastating insect infests eastern forests over a considerable area. An air blitz is planned during which 50,000 acres will be sprayed with DDT, while 15,000 additional acres will be treated with ground equipment. New York's Department of Conservation will furnish two planes and the DDT; our Bureau of Entomology and Plant Quarantine will furnish two additional planes and some technical assistance.

Save money! Save food!

"Money-Saving main dishes" is the title of AIS-69, issued by our Office for Food and Feed Conservation, for furtherance of the food conservation program. It contains about 150 tested recipes especially prepared by Bureau of Human Nutrition and Home Economics to help YOU save food. This looks like the thing we have been waiting for. USDA gives it top rating. Secretary Anderson, in his foreword, says that following these suggestions will help you, help your country, and help promote world peace. You should have a copy. Apply through your own agency channels.

"Keeping Memory Green"

Ladies' Home Journal for May features an excellent article on community forests as war memorials. "Forests become a living reminder that surveillance and sacrifice are necessary to protect the beauty and riches of our land," points out the Journal, and quotes Chief Lyle F. Watts, of Forest Service, on critical conditions in the forest and wildland watersheds. We must act promptly, says Mr. Watts, to repair damaged watersheds, prevent flash floods and rampaging streams. There are today 2,489 community forests with an aggregate of 3,209,856 acres. But there are several million more acres of unused and idle lands awaiting needed development. According to the Journal, "Long overdue effort to safeguard our natural treasures should start near home with community forests."

Information profession

An USDA information specialist, animated by the proper passion for anonymity, recently wrote us thus: "I have been hopeful for a number of years that some day the public service information profession would achieve enough maturity that it could call itself a profession, create professional standards for itself, build up a considerable degree of pride in itself, and show to the world its principles of integrity, ethics, and self-discipline as an answer to unjust criticism and suspicion so often directed to it. When personnel men, management specialists, photogrammetrists, economists, marketing specialists, foresters, wildlife specialists—the list is endless—can do so, and profit from the satisfaction of scratching one another's backs, the pride of belonging, the pleasure of self-analysis, the exchange of professional advice and experience, and so on, why can't we? But I am afraid it will be many years before we feel sufficiently secure to speak out proudly of what we are doing."

Operational research

We once mentioned "operational research" herein. Later someone wrote in wanting to know more about it, but that was all we knew. Indeed the bibliography on the subject is still limited. But March 13, Nature (London), available from the USDA Library, contains quite a comprehensive documented article on the subject, by Sir Charles Goodeve. See also the documented communication on the same subject by C. H. Waddington of the University of Edinburgh's Institute of Genetics, page 404, same issue.

Mr. Hill

Former Under Secretary Grover Hill, President of the Intermediate Credit Bank, Wichita, Kans., was an official visitor to Washington recently. He is chairman of the legislative committee of the presidents of these banks and was here on business. But in these uncertain times a few encouraging words from the benign and benevolent sage of the plains certainly helped brighten things up.

Pay bills

Every now and then someone writes from the field asking when his pay will be raised in accordance with a newly passed act of Congress. But no such act has been passed. There are 40 or more bills for raises to Federal workers, some involving mere straight raises—or cost-of-living bonuses, some involving complete revision of the classificatory system. House and Senate committees have even approved some of these bills. But remember that a bill, to become law, must have not only committee approval; it must also be considered on the floor of both Houses of Congress, and possibly by a joint committee of both Houses, then win final approval of each, and the President's signature, before it becomes law. Approval of a bill by a committee of one House of Congress does not by any means transform it into law.

MAY 10, 1948

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USDA

FOR MAY 24, 1948

SECRETARY RESIGNS

On May 7, Secretary Anderson wrote President Truman, in part as follows: "Please consider this my resignation as Secretary of Agriculture, to be effective at your convenience. In view of the fact that I desire to leave for New Mexico May 10, it would best suit my plans if my resignation could be made effective on that date. . . . It has been a great pleasure to serve in your Cabinet. . . . The decision of Senator Hatch not to seek re-election brought me into the New Mexico primaries as a candidate for his seat and advanced the date of my leaving. Nevertheless, I do so with regret."

Mr. Truman, addressing the Secretary as "Dear Clint," replied, May 10, in part as follows: "I appreciate fully the circumstances which prompt your letter of May 7. I had hoped that conditions would permit you to continue longer in your present post of responsibility. Although I do so reluctantly and with deep regret, I acquiesce in your decision and accept, effective at the close of business this day, your resignation as Secretary of Agriculture. In doing so, I hope sincerely that you will return to the legislative councils of the Nation."

Mr. Truman continued that Mr. Anderson had abundantly justified the confidence imposed in him, and attributed to the departing Secretary's wise policies the record prosperity of the Nation's farmers, and avoidance of a disastrous set-back such as plagued agriculture after World War I. Said the President:

"Every American farmer can bear witness to the benefits which have accrued from your administration. Nor has your activity been reflected solely in the prosperity of the American farmer and our domestic economy. Your contribution in devising means and furnishing provisions for the relief of hunger and want in countries devastated by the war has been of the highest importance."

THE HONOR AWARDS

THE SECOND of the USDA Honor Awards Programs was held as nearly on time as possible, considering the fact that the Department's eighty-sixth birthday fell on May 15, a nonworking day. Hence the ceremonies took place on May 17, the next working day thereafter. The Secretary's statement in the Program Book for the Honor Awards Ceremony read as follows:

"A century or so ago, Ralph Waldo Emerson wrote: 'The reward of a thing well done is to have done it.' That is true. That is the real reward. This ceremony, therefore, is in no sense an attempt to make recompense to Department of Agriculture workers for their outstanding service.

"Yet there is certainly a place and a need for recognizing exceptional work and length of service. It seems to me that the presentations fulfill a threefold purpose. First, we show our appreciation for the talented, efficient, reliable work of outstanding public servants. Second, we help bring to light the achievements of others who in their offices or laboratories have given the same unstinting devotion to duty that has characterized the recipients of these honors today. Finally, we hope that today's ceremony will inspire many more among us to give the utmost in faithful service to the Department of Agriculture and, through the Department, to the whole people of the United States.

"Thus, to the great satisfaction that comes from a thing well done, the honor recipients today can add the knowledge that their achievements are an encouragement and an inspiration to their colleagues."

Farm real estate

Circular No. 780, The Farm Real Estate Situation, 1946-47, by A. R. Johnson, Bureau of Agricultural Economics, has appeared.

Citations for Distinguished Awards

Individual

PHILIP V. CARDON, Agricultural Research Administration, Beltsville, Md.: For outstanding service and exceptional leadership in the advancement of agricultural science.

JOHN I. HARDY, Bureau of Animal Industry, Beltsville, Md.: For his imagination and persistence in inventing and constructing altogether new devices for measuring important qualities of wool and other fibers.

FREDERICK D. RICHEY, Bureau of Plant Industry, Soils and Agricultural Engineering, Knoxville, Tenn.: For outstanding service in organizing and leading the cooperative corn-breeding program which gave hybrid corn to American agriculture.

WILLIAM D. SMITH, Production and Marketing Administration, New Orleans, La.: For outstanding service to agriculture and rural life through the invention of a machine for testing milling quality of rough rice and the development of rice standards.

Unit

INSECTICIDE LABORATORY, Bureau of Entomology and Plant Quarantine, Beltsville, Md.: For chemical research which discovered new insecticidal chemicals, new means of increasing the usefulness of insecticides, new methods of chemical analysis, and for inventing new ways of applying insecticides.

TUBERCULOSIS ERADICATION DIVISION, Bureau of Animal Industry, Washington, D. C.: For its invaluable contribution to the health and welfare of this Nation through organizing, systemizing, and directing the campaign for controlling and eradicating tuberculosis in livestock.

ZOOLOGICAL DIVISION, Bureau of Animal Industry, Washington, D. C.: For the discovery and development of phenothiazine, a drug of world-wide application and usefulness for the removal of internal parasites of domestic animals.

Unit awards will be made at a later date at unit headquarters.

Career men

Appointment of James Lawton, a veteran career employee, as Administrative Assistant to the President may now be bracketed with the appointment of Postmaster General Donaldson to show that Civil Service workers can rise to high station in Federal Government service.

Citations for Superior Awards

Individual

ROBERT T. BEALL, Rural Electrification Administration, Washington, D. C.: For the development and application of progressive concepts of public administration leading to the efficient and economical administration of the rural electrification program.

VIVIAN M. BEHENNA, Bureau of Agricultural Economics, Washington, D. C.: For her outstanding contribution to the efficient functioning of the statistical service work of BAE through her personal initiative and efforts in organizing and maintaining basic statistical series.

JULIUS M. BOBERSKI, Production and Marketing Administration, Chicago, Ill.: For outstanding service in traffic research leading to the invocation and utilization of little-known and seldom-used provisions of published transportation tariffs applicable to the shipment of grains for export via Lake ports, and for unusual skill in securing the cooperation and acceptance by the carriers and warehouses of these regulations, which resulted in a saving of more than \$175,000 in transportation costs and charges.

WILLIAM F. CALLANDER, BAE, Washington, D. C.: For preparing and releasing basic crop and livestock statistics throughout the war and following food crisis period, often under difficult conditions, in such a manner as to maintain the confidence of the farmers, administrators, and the general public.

CARL COLVIN, Farm Credit Administration, Washington, D. C.: For outstanding skill and effectiveness in establishing the organization and developing procedures to carry out the Department's responsibilities for the disposal of surplus real property acquired by the Government for war purposes; and for planning and administration of organizational and operational improvements effected in the Federal Land Bank System.

DR. JOHN C. COWAN, Bureau of Agricultural and Industrial Chemistry, Peoria, Ill.: For research on the fundamental chemistry and the utilization of vegetable oils for the production of rubber substitutes and thermoplastics which led to the commercial utilization of soybean oil products for certain rubber goods, especially those used for heat-sealing and protective coverings.

VIOLA E. CULBERTSON, BAE, Washington, D. C.: For her contribution to

ing the delivery and use of water by irrigators.

the statistical analyses of BAE by translating new and advanced statistical methods into workable and readily understood instructions.

IRENE L. DEADMON, Bureau of Human Nutrition and Home Economics, Washington, D. C.: For exceptional skill and ingenuity in the design and production of schedule forms and tables, and for her unusual success in developing a high degree of competence in workers under her supervision.

ALLEN D. DORRIS, Farmers Home Administration, Montgomery, Ala.: For unusual skill, industry and initiative in developing specialized techniques for loan-accounting operations which have contributed greatly to efficient operations in the Area Finance Office of FHA at Montgomery, Ala.

KARL A. FOX, BAE, Washington, D. C.: For his contribution and assistance in the preparation of a series of key reports relating to European recovery and American agriculture.

LOUIS GORRIN, Office of the Solicitor, Washington, D. C.: For exemplary competence, initiative, zeal, and industry, and the performance of outstanding legal services in matters essential to the progress of area-coverage rural electrification resulting in valuable contributions to agriculture and rural life.

DR. GEORGE E. HOLM, Bureau of Dairy Industry, Washington, D. C.: For outstanding contributions to the dairy industry through research on the preservation of quality in milk and milk products, the development of techniques for estimating the constituents in milk, and methods of utilizing milk solids in various forms.

LYMAN S. HULBERT, Sol., Washington, D. C.: For meritorious service to American agriculture and rural life with respect to research relating to and the development of the law pertaining to agricultural cooperatives.

WILLIAM X. HULL, Soil Conservation Service, Washington, D. C.: For outstanding service to agriculture in having spread the gospel of soil conservation through developing and coordinating a program whereby outstanding representatives of foreign nations have been trained in soil conservation so that they might return to their native land and develop soil conservation programs.

WELLS A. HUTCHINS, SCS, Berkeley, Calif.: For especially meritorious service to agriculture in the Western United States and the Territory of Hawaii in codifying and clarifying western water laws and simplifying regulations affect-

ing the delivery and use of water by irrigators.

P. BURKE JACOBS, AIC, Peoria, Ill.: For the collation and interpretation of economic factors, together with authoritative publications on the utilization of agricultural products as sources of alcohol, together with coordinating wartime research bearing on critically needed alcohol production.

R. D. JENNINGS, BAE, Washington, D. C.: For his development of a method of evaluating feed supply—livestock production relationships that contributed materially to the development of balanced feed and livestock production programs during and after the war.

LEWIS A. JONES, SCS, Washington, D. C.: For especially meritorious service to agriculture through his leadership and efforts in the drainage and reclamation of wet, swamp, and malaria-infested lands, and the conservation, use, and management of water resources.

CECILE E. KENT, FHA, Caldwell, Idaho: For superior administration of a program of supervised farm credit, for maintaining excellent relations with private and public agricultural organizations, and for demonstrating outstanding professional skill in the field of farm management.

DR. ERNEST W. LASKE, Bureau of Entomology and Plant Quarantine, Kerrville, Tex.: For the development of new and more effective methods for the control of insects attacking livestock, and for his untiring leadership in cooperative efforts to demonstrate their application.

DR. ELBERT C. LATHROP, AIC, Peoria, Ill.: For his outstanding contribution in the field of agricultural residues utilization which led to the development of a unique method for cleaning metals with ground corncobs and rice hulls known as "soft-grit" blasting.

EARL W. LOVERIDGE, Forest Service, Washington, D. C.: For outstanding skill in public administration through the development and application of the principles of scientific management in job-load analysis, work planning, methods management, and inspection controls.

WILLIAM M. MACKELLAR, Bureau of Animal Industry, Washington, D. C.: For directing activities which have led to the ultimate eradication of the cattle-fever tick in the United States, making it possible to safeguard the cattle industry of the entire country and to develop and improve the beef herds in 15 Southern and Southwestern States.

PAUL V. MARIS, FHA, Washington, D. C.: For his pioneering leadership in

developing and directing a national program designed to strengthen and preserve the position of the family farmer in America, which has successfully provided opportunity for security on farms, dignity in homes, and participation as stable citizens of communities for thousands of farm families.

MARY R. MLAKUS, AIC, Peoria, Ill.: For her performance beyond that required for an excellent efficiency rating while serving as a clerk-typist in the Stenographic Pool in the Northern Regional Research Laboratory.

REMO MOLINAROLI, SCS, Kingstree, S. C.: For outstanding leadership in helping to develop a sound soil conservation program, and particularly for his efforts in developing a widespread interest and adoption of drainage and irrigation practices in an area where such practices had not been prevalent.

J. V. MORROW, PMA, Washington, D. C.: For the initiation of a new type sales contract which expedited the movement of large quantities of surplus tobacco products and recovered for the Government a high percentage of their original cost.

ALFRED M. NEUBERT, AIC, Pullman, Wash.: In cooperation with Mr. Matthew K. Veldhuis, for the invention and development of the froth flotation process for removing foreign materials from vined green peas, a major contribution to the pea-growing farmers and processing plants.

MATTHEW K. VELDHUIS, AIC, Winter Haven, Fla.: In cooperation with Mr. Alfred M. Neubert, for the invention and development of the froth flotation process for removing foreign materials from vined green peas, a major contribution to the pea-growing farmers and processing plants.

MARION NORTHROP, REA, Washington, D. C.: For an exceptionally high degree of initiative and ability beyond that required for an excellent efficiency rating which kept the work of the section on a current basis under unusually difficult conditions and, in addition, for devising labor-saving office methods and procedures.

RALPH L. PARSHALL, SCS, Fort Collins, Colo.: For perfecting and introducing simple, economical, and effective water-measuring and desilting devices used extensively in irrigation systems in the United States and foreign countries.

WALTER C. PETERSON, FS, Colorado Springs, Colo.: In cooperation with Mr. Emerson T. Schuster, for their outstanding competence in an emergency in rendering aid to survivors of an airplane

crash which occurred on the north slope of Pikes Peak.

EMERSON T. SCHUSTER, FS, Colorado Springs, Colo.: In cooperation with Mr. Walter C. Peterson, for their outstanding competence in an emergency in rendering aid to survivors of an airplane crash which occurred on the north slope of Pikes Peak.

PAUL H. ROBERTS, FS, Missoula, Mont.: For outstanding leadership, resourcefulness, and successful achievement in the administration of the Prairie States Forestry Project and two other emergency projects of FS.

DOYLE P. SCHMITTER, FHA, Bloomfield, Iowa: For his aggressive leadership and effective use of the resources of the Department of Agriculture to aid Farmers Home Administration borrowers in Davis County, Iowa, to secure for themselves a stable place in agriculture by developing an excellent system of family-type farming.

CLARICE LOUISBA SCOTT, HNHE, Beltsville, Md.: For her pioneering work in the creation of functional clothes for women who work on farms, in the home, and in factories which resulted in the setting of new standards for a large portion of the work-clothes industry.

MARTIN SORKIN, PMA, Washington, D. C.: For initiative in devising work methods that have resulted and are resulting in important savings in money, time, materials, personnel, and equipment.

DR. PERLEY SPAULDING, Bureau of Plant Industry, Soils, and Agricultural Engineering, New Haven, Conn.: For his unusually productive research and outstanding contributions to the science of forest pathology and its application to forest management practices in the United States.

NINA H. STEELE, FHA, Panguitch, Utah: For exceptional performance of her duties beyond that required for an excellent efficiency rating under conditions that demanded a great deal of ingenuity, administrative ability, and a high sense of public service.

DR. GOTTHOLD STEINER, PISAE, Beltsville, Md.: For his outstanding contributions to American agriculture through his research on nematodes, their identification, classification, and means of control.

W. W. SWETT, BDI, Washington, D. C.: For his development of a technique for examining young calves to predict their future producing capacity as cows, and for his outstanding contribution to the knowledge of the relation of growth, development, and body con-

formation of cows to their milk-producing ability.

GRACE WANSTALL, FCA, Washington, D. C.: For her outstanding contribution to the factual knowledge of agricultural cooperation through the making of annual and authoritative estimates of the scope and business of farmers' cooperative associations engaged in marketing, purchasing, and related services.

DR. BYRON H. WEBB, BDI, Washington, D. C.: For his contributions to improvement in the quality of condensed and evaporated milk by controlling the factors responsible for maintaining the color, flavor, and stability of the milk constituents; and for originating and developing new food products containing milk solids, which afford a means of utilizing surplus byproducts.

THOMAS B. WHITE, FHA, Clarksburg, W. Va.: For his leadership, and performance, as County Farmers Home Administration Supervisor in central West Virginia, which assisted low-income farm families in becoming successful farmers.

EARLE O. WHITTIER, BDI, Washington, D. C.: For his outstanding accomplishments in developing methods and inventions for utilizing various constituents of milk for the manufacture of lactic acid, lacquers, resins, casein fiber, and alcohol.

Unit

AUDIT AND STATISTICAL SECTION, Caribbean Area Office, PMA, San Juan, P. R.: For the high degree of cooperation and continued efficiency in work performance, resulting in a saving in administrative expenses to the Government, as well as benefiting the Puerto Rican farmers through time saved in expediting their payments.

LAKE CITY BRANCH, Southeastern Forest Experiment Station, FS, Lake City, Fla.: For outstanding research achievements leading to new naval stores production methods through acid stimulation, better chipping and gum-collecting techniques, and the effective dissemination of information, resulting in widespread adoption of these practices by the industry, thereby increasing profitability of naval stores production, labor efficiency, and more conservative timber use.

POULTRY SECTION, Animal Husbandry Division, BAI, Beltsville, Md.: For achievement in practical poultry research resulting in great reduction in chick-embryo mortality in incubation; for breeding and developing the Beltsville Small White Turkey; for demonstrating a practical means for producing

eggs of high keeping ability and food value, and for leadership in developing and organizing the National Poultry Improvement Plans.

UTILIZATION OF ANIMAL FATS RESEARCH UNIT, Eastern Regional Research Laboratory, AIC, Wyndmoor, Pa.: For research which resulted in better-quality synthetic rubber and substantially increased rubber production, without further expansion of plant facilities, and which made possible the utilization of low-grade animal fats for making the improved emulsifiers needed in the manufacture of GR-S synthetic rubber.

U. S. SUGAR PLANT FIELD STATION, PISAE, Canal Point, Fla.: For services above and beyond the call of duty in connection with salvaging most of a valuable world reference collection of sugarcane varieties, comprising 2,000 kinds of sugarcanes, that was nearly destroyed by being covered by 6 feet of water as a result of the Florida hurricanes of 1947.

Length-of-Service Awards

THE FOLLOWING employees received these awards for 40 or more years of service in the Department of Agriculture, as of May 15, 1948. Awards to field personnel will be made at their official headquarters.

AMES, HAROLD A., EPQ—Trenton, N. J.; ANGELL, ARTIE B., BAI—Baltimore, Md.; BARBER, HERBERT S., EPQ—Washington, D. C.; BARKER, CLAUDE K., FS—San Francisco, Calif.; BARNHART, EMMETT P., BAI—Providence, R. I.; BOLLMAN, PARKER J., PMA—Baltimore, Md.; BREININGER, CHARLES B., BAI—Baltimore, Md.; BROTHERS, CHARLES S., SOL—Missoula, Mont.; CARTER, EARL H., BAI—Omaha, Nebr.; CARTER, KENNETH A., EPQ—Beltsville, Md.; COFFEY, WILLIAM E., BAI—Chicago, Ill.; COUGHLIN, LOUIS E., FS—Denver, Colo.; CULLINAN, THOMAS L., INF—Washington, D. C.; DE FOSSET, ALBERT J., BAI—Columbus, Ohio; DONNELLY, SAMUEL J., BAI—Indianapolis, Ind.; DYE, WILLIAM C., BAI—San Antonio, Tex.; ERVIN, CLARENCE, BAI—South St. Joseph, Mo.; FAGAN, GEORGE M., FS—Atlanta, Ga.; FITTING, RAY R., FS—Missoula, Mont.; GARLAND, JAMES T., PAI—Ottumwa, Iowa; GRANGER, CHRISTOPHER M., FS—Washington, D. C.; HEISS, JOHN G. H., BAI—Milwaukee, Wis.; HENLEY, ROBERT R., BAI—Washington, D. C.; HERZBERG, FRED, BAI—Davenport, Iowa; HESS, MILLARD H., PMA—Washington, D. C.; HIGGINS, JAY, FS—Denver, Colo.; HOLMAN, HERBERT P., AIC—Washington, D. C.; HULBUSH, CHARLES A., BAI—Walla Walla, Wash.; HYATT, BRADFORD A., BAI—Buffalo, N. Y.; IRION, HARRY, FS—Washington, D. C.; KELLOGG, CLARENCE F., BAI—Los Angeles, Calif.; KEMPER, JOHN M., BDI—Washington, D. C.; KEOUGH, TIMOTHY A., BAI—Chicago, Ill.; LEMERY, ALBRO A., BAI—Kansas City, Kans.; LYNCH, JOHN H., P&O—Washington, D. C.; LYON, RAYMOND F., BAI—New York, N. Y.; MALONEY, MICHAEL J., BAI—Philadelphia, Pa.; MILLER, JOHN M., EPQ—Berkeley, Calif.; MORGAN, WILL J., PMA—Beltsville, Md.; MORSE, WILLIAM J., PISAE—Beltsville, Md.; ORMORD, DAVID W., BAI—Chicago, Ill.; PAYNE, CASSIUS J., BAI—

Distinguished Service Awards Board

ROBERT RAMSPECK, Executive Vice President, Air Transport Association of America, Washington, D. C. (Chairman).

CHARLES F. BRANNAN, Assistant Secretary of Agriculture.

DR. JOHN A. HANNAH, President, Michigan State College, East Lansing, Mich.

HAZEL K. STIEBELING, Chief, Bureau of Human Nutrition and Home Economics.

GERALD B. THORNE, Vice President, Wilson & Co., Chicago, Ill.

T. ROY REID, Director of Personnel, USDA.

Superior Service Award Board

E. J. OVERBY, Assistant to the Secretary (Chairman).

DR. THOMAS S. BUIE, Regional Conservator, Soil Conservation Service, Spartanburg, S. C.

W. A. CRAFT, Director, Regional Swine Laboratory, Agricultural Research Administration, Ames, Iowa.

JAMES A. DOYLE, Associate Solicitor.

ROBERT W. HERDER, Director, Budget and Management Branch, Production and Marketing Administration.

KARL MAGLEBY, State Director, Farmers Home Administration, Salt Lake City, Utah.

T. ROY REID, Director of Personnel, USDA.

Federal salaries

The article entitled "Salaries of Federal Employees, July 1945-July 1947," in the Monthly Labor Review for March 1948, published by the Department of Labor, will prove of interest to practically everyone in the USDA. Library gets this periodical.

National Stockyards, Ill.; POWICK, WILMER C., BAI—Beltsville, Md.; RENTER, WALTER W., BAI—Cincinnati, Ohio; RICHARDS, C. AUDREY, PISAE—Madison, Wis.; ROUSSEAU, GEORGE W., INF—Washington, D. C.; SCHOENING, HARRY W., BAI—Washington, D. C.; SCHULTZ, EMIL E., BAI—Omaha, Nebr.; SHAMBEAU, CHESTER E., BAI—South St. Joseph, Mo.; SIEBLER, ARTHUR C., BAI—Cincinnati, Ohio; SIEVERS, ARTHUR F., PISAE—Beltsville, Md.; SMITH, CLAUDE R., AIC—Wyndmoor, Pa.; SMITH, FRED G., PMA—Chicago, Ill.; STEVER, ARTHUR C., BAI—Albany, N. Y.; TILLEY, FRANK W., BAI—Washington, D. C.; WALKER, SHIPLEY B., EPQ—Washington, D. C.; WILLSON, FREDERICK C., BAI—Jersey City, N. J.; WOLLMERSHAUSER, ANDREW G., BAI—St. Louis, Mo.; ZOOK, LESLIE L., PISAE—North Platte, Nebr.

Reaction to the Awards

LIKE ALL OTHER institutions, the USDA is made up of persons of many different kinds. But undoubtedly most of us fully appreciate the Honor Awards, if we are so fortunate as to win one of them—even those for length of service.

An ear to the ground indicates that the Honor Awards Program, initiated in the Department last year, actually does act as an incentive to greater service on the part of a vast majority of our employees. Officials who have visited various field stations, or who have participated in the presentation of Length-of-Service Awards in various offices in Washington, report generally enthusiastic approval on the part of those granted the medals and certificates. Possibly a few of the ladies would prefer a button reading "1 Year Or More" in lieu of the actual number of years served, but even these are in a minority.

The Director of our Federal experiment station at Mayaguez, P. R., reports enthusiastic reception of the length-of-service pins there. East and West, North and South the report is the same. Clippings about special banquets and ceremonies held in the field to present the awards indicate high interest and deep appreciation. Some employees have, it is true, complained that the award ceremonies were not always taken seriously enough to assume their rightful importance. But whether at the Northern Regional Research Laboratory or in a Secretary's staff conference you see the length-of-service buttons on many coat lapels.

After all, we are part of a great institution with a long and honorable history and fine traditions of its own. We have as much right and reason to take pride in the awards it gives, as do employees of other great agencies and institutions, public and private, many of which today and long since have found award systems highly stimulating and useful.

Food Conservation Program

The Consumer Food Conservation Program, based on legislation enacted by the special session of the Eightieth Congress providing for food conservation based upon voluntary effort by consumers, producers, and industry, was announced April 21. While meatless Tuesdays were rescinded, consumers were asked voluntarily to observe a weekly meatless day. Money-Saving Main Dishes, the new publication prepared by USDA and mentioned before herein, suggests practical ways in which homemakers can cooperate. For more detail write Press Service, USDA, and ask for Nos. 808, 838, 841, and other available releases on the Food Conservation Program.

Major incentive programs

USDA NOW HAS three major employee incentive programs. These are Cash Awards, Meritorious Promotions for superior accomplishment, and Honor Awards. While the three programs are administered more or less independently, there is a definite relationship between them. If we ranked them administratively we should probably place the Honor Awards at the top, followed by the Meritorious Promotion, and then the Cash Awards. The legal authority for both the Cash and Honor Awards is found in Public Law 600, Seventy-ninth Congress, together with Executive Order 8917. The legal authority for the Meritorious Promotions for superior accomplishment is in the Federal Employees Pay Act of 1945, Public Law 106, Seventy-ninth Congress, first session.

All employees of the Department are eligible for Cash and Honor Awards. The Cash Award is, however, restricted to suggestions adopted subsequent to August 2, 1946, and the Honor Awards are restricted to employees on the rolls on and after May 15, 1947. Eligibility for superior accomplishment promotions is restricted to occupants of classified positions compensated on a per annum basis who have not reached the maximum salary of their grade. Cash Awards are limited to employees in continental United States, but the other incentive programs also include those outside the States.

A troublesome feature of the programs is their criteria or eligibility standards. The standards for Honor Awards are broadly stated in Secretary's Memorandum No. 1186, February 11, 1947, and the Administrative Regulations, Chapter 62, Title 8. Actually the citations stating the accomplishment justifying the award, which are printed each year in the ceremony program (and in *USDA*), will probably do the most toward establishing specific criteria and standards. Unfortunately, there is some overlapping of the standards for Cash Awards and promotions for superior accomplishment.

For example, the old standards issued by the Civil Service Commission regarding Meritorious Promotion state that an employee who submits a suggestion or idea that is adopted and saves the Government money is eligible. Actually, this same criterion is used in the Cash Awards plan, since its purpose is to pay for suggestions or ideas which are beneficial to Government operation or which save the Government money.

In other words, in certain instances agencies can determine administratively whether to give Cash Awards or Meritorious Promotions. Actually, however, the decision will usually be made by the employee, since the individual may definitely submit his idea or suggestion for a Cash Award. A single suggestion or idea by an employee is not eligible for both a Cash Award and a Meritorious Promotion; however, the idea or suggestion might be eligible for consideration for an Honor Award, regardless of the fact that it had been a basis for a Cash Award or Meritorious Promotion.

If this statement does not sufficiently clarify the situation, write the editor of *USDA* your questions and he will try to have them answered authoritatively.

You in the field!

UNDOUBTEDLY a very great many of you appreciated your Length-of-Service Awards, but at least one of you, an entomologist stationed in Georgia, thought to write in to Secretary Anderson to express this appreciation. He said, among other things: "The Field Service does appreciate recognition of this type, and the little pin and diploma go a long way toward showing us that we are not after all 'forgotten men,' but that somewhere, someone in the great machine that makes up the Department of Agriculture is not unmindful that we are small cogs in that machine."

The letter received a personal reply from the Secretary from which the following material is quoted: "Let me assure you, as one of the 40,000 of our Department people who are stationed in the field, that you are not 'forgotten men.' We could as easily forget the Department as forget our people who are in the field. Most of the Department is in the field.

"I can understand how our folks in field stations and scattered outposts of our organization may regret that they miss out on some of the flow of information on our activities, and miss frequent personal contacts with other employees * * * I can understand how a sentinel can be lonely at his post, but I hope our field employees will never feel they have been forgotten.

"Certainly, we realize here how completely we depend on the field. The Department literally sees, hears, moves, and serves through its field people. Without the field detachments there would be little need for a Washington office in most of our agencies."

Director-General Dodd

ON APRIL 14, FAO announced that Under Secretary Dodd had been elected Director-General of the Food and Agriculture Organization of the UN, by acclamation, to succeed its first Director-General, Sir John Boyd Orr, the distinguished Scottish nutrition expert. Mr. Dodd, who is singularly well-qualified to act as Sir John's successor, will serve through the close of the 1950 session of the FAO Conference.

A native of Iowa, born in 1879, Mr. Dodd was educated there, and then lived in both North and South Dakota before settling in Oregon, in 1900. After some years as a pharmacist he began to devote his full time to farming by 1910. His 2,000-acre ranch is located in the irrigated area near Haines, Oreg., and is devoted to wheat, barley, hay, pasture, and livestock. In 1933, Mr. Dodd became county chairman of the AAA wheat committee and later became State chairman of the Oregon Corn-Hog Board of Review and, in 1936, chairman of the Oregon State Agricultural Conservation Committee.

Two years later he became AAA field representative in the Western States and, in 1938, was appointed Assistant Director of AAA's Western Division in Washington, D. C., becoming Director in March 1939, and serving 4 years. He next served as chief of AAA and then as Director of the Field Service Branch, Production and Marketing Administration. He became Under Secretary of Agriculture April 8, 1946, and headed the United States delegation to the FAO Conference in Copenhagen in September of the same year.

He was thereafter United States Delegate to the FAO Preparatory Commission to study world food-program proposals and United States Delegate to the Third Session of the FAO Conference in Geneva, August 15-September 11, 1947. He served as chief United States representative at both sessions of the recently organized council of FAO, and was named Chairman of the United States Delegation to the International Wheat Council, January 29, 1948, of which he had long been a member. Our loss is FAO's gain.

INTERN PROGRAM

The Civil Service Commission has announced the Eighth Administrative Intern Program. It will begin September 7, 1948, and continue through February 4, 1949. Nominations from the bureaus must be submitted to the Office of Personnel on or before June 15, 1948. This program is intended primarily for employees whose headquarters is in Washington, D. C.

That Northern Lab

A RECENT RETURN visit to the Northern Regional Research Laboratory at Peoria proved it still has its old fascination. A devoted staff works here earnestly, many of whom could earn far more money outside, but they have found this institution an ideal place in which to carve out a career. Science, as organized knowledge, is here ever in an eternal state of becoming, never a static one of mere being.

The job is never done. New ideas spark daily. New developments never cease. The penicillin group in Dr. R. W. Jackson's domain, which won that so richly deserved Distinguished Service Award, is now hard at it on other things quite as important, of which polymyxin, newest of the miracle antibiotics is only the most spectacular. Simultaneously discovered by three different groups—including one in Britain—it was first announced by workers at the Northern Lab. While many tests remain to be completed, it looks as if it may prove a valuable supplement to penicillin and streptomycin against some organisms.

Moreover, the monumental Manual of the Penicillia by Kenneth B. Raper and Charles Thom, is at last ready for publication, after two or more laborious years. The drawings by assistant mycologist Dorothy I. Fennell, are truly works of scientific art. The job as a whole was performed with joint sponsorship and support of the National Science Fund and the Northern Regional Research Laboratory. Dr. Frank H. Stodola, one of the penicillin award group, was our escort around these laboratories.

Another thing that sticks in our mind, possibly because of Dr. Arthur C. Beckel's unrestrained enthusiasm, is soybean protein, about which Dr. Allan K. Smith also went into detail. Versatile beyond description, it may in time turn up as a thermoseal, as glue, in the form of jelled desserts or ice cream, as the meringue on a lemon pie, or in jelled cocktails with a new look! Soybean flakes after the oil has been extracted with hexane (pure gasoline) are the starting point. These flakes are then debittered by a further extraction with alcohol, which also rids them of some anticoagulant or gel-inhibitor. The water-soluble part of the flakes appears to be suitable for many industrial uses and probably for many food specialties.

This soybean protein, in solution, will whip like egg white, even when fat or oil is added. Or flavor, sugar, and other ingredients can be added and it will

freeze like an ice cream of smooth texture—a sort of indestructible ice cream, because it doesn't melt and run when it warms, but retains its shape. Under certain circumstances, it gels in 50 percent alcohol. Finally, this protein forms a permanent heat seal, a coating to seal envelopes, a glue that will cause metal to adhere permanently to metal, glass to glass. It is economical and incredibly strong. Envelopes sealed with it cannot thereafter be steamed open, defeating the curiosity of the boarding house mistress forever. The future of these developments seems especially promising.

Then it is nice to go to Dr. E. C. Lathrop for a dash of genial cynicism, since he will tell you as readily what cannot be done as what can be with agricultural residues, and his attitude is an excellent diluent for impractical overenthusiasm. The editor often gets attacks of this malady. A talk with Dr. Lathrop is as good a tonic as we know.

Finally, there was a businessman along on this trip and the editor learned how successful these laboratories are, not only in developing new ideas, but in passing along know-how and in enabling outside concerns, small or large, to put them into profitable operation. He learned much of the intelligent collaboration between these great laboratories and outside industry, and of the manner in which they spur small enterprise and foster healthful competition in the good old American way.

Document dates

Because sessions of Congress rarely end long enough before July 1 to permit Office of the Solicitor to bring USDA Document No. 2 current and complete for issue on that date, this document, entitled "Abridged List of Federal Laws Applicable to Agriculture (Including Reference to Former Functions)" will hereafter appear in newly revised form on September 1 of each year. Because the period just before July 1 brings the intense pressures incident to the end of our fiscal year, and that before January 1 involves more festive holiday activities, USDA Document No. 6, Important Recent Achievements of Department of Agriculture Scientists (in ARA, SCS, FS, PMA, FCA, and BAE) will hereafter appear in newly revised editions on October 1 and March 1 of each year.

Smarter than we thought

Tomatoes, tobacco, and red clover are smarter than we thought. Investigators at the University of Wisconsin recently report finding that they can utilize amino acids as their sole source of nitrogen. Animals make their own bodily proteins by tearing down the proteins they consume into their constituent amino acids, and then using these acids as building blocks to fabricate the proteins desired in the body structure. Plants can take nitrogen from the air or from mineral fertilizers, producing amino acids and proteins therefrom; now it appears they can start with the amino acids themselves and build proteins. But not all amino acids can be so utilized as some are unsuitable, some even toxic.

Facts about REA

IN 1935 ONLY about 10 percent of the Nation's farms were electrified. Power companies were reluctant to take profit risks involved in making service available to a greater number, and many assumed that such farms as required electricity for major operations already had it. But Congress thought differently, and Rural Electrification Administration was established, authorized to make self-liquidating loans to bring electric service to unserved persons in rural areas. It operates no facilities, has no field offices, and makes no grants. Its loans are made on the basis of full coverage of areas served. On May 11 it celebrated its thirteenth birthday.

While it was assumed that existing power companies would use REA lending facilities to extend electrification, such companies borrowed less than one one-hundredth of the starting fund made available 1935-36. Today 90 percent of REA borrowers are rural electric co-ops—independent, locally owned business enterprises—most of which operate distribution systems only, purchasing power from commercial power companies or public agencies. Relatively little has been loaned to finance generating plants, transmission facilities, or the installation of wiring, equipment, or appliances on consumer premises.

Loans are made for 35 years at a flat 2 percent interest, the amount REA can loan annually being fixed by Congress. Before the war the program was geared to loans of \$40,000,000 annually; in 1947 alone, however, REA advanced more than \$225,000,000 in response to actual demand. By June 1948, well over a billion dollars will have been advanced to borrowers. More than 61 percent of the Nation's farms are now electrified. Borrowers have repaid more than \$23,000,000 on principal in advance of time due; only \$949,000 is more than 30 days overdue, and there has been but one foreclosure in REA's history. But a bigger job still lies ahead and is now being tackled, for more than 2 million of the Nation's farms are still to be electrified.

RMA

The National Planning Association (800 21st St. NW., Washington, D. C.) has released a special report on the Agricultural Research and Marketing Act of 1946, prepared by the Agricultural Committee on National Policy, headed by Donald Murphy, editor of Wallace's Farmer and Iowa Homestead. It deals with the objectives of and procedures under the act, and its provisions, its administration, the manner of selecting projects, and other essential information.

Green grows alta fescue

THE 17-ACRE front lawn at Plant Industry Station, Beltsville, Md., offers unmistakable evidence that alta fescue, the grass developed by H. A. Schoth, Bureau of Plant Industry, Soils, and Agricultural Engineering, and agronomists at the Oregon Experiment Station, holds promise for the East. The lawn is a lovely uniform green carpet of weed-free turf, a splendid contrast to the crabgrass-dominated plantings of Kentucky blue grass and red fescue formerly grown.

The good stand of alta fescue is particularly impressive when you consider the poor soil. A mixture of gravel, sand, silt, and clay, it is virtually redistributed subsoil. The alta fescue was seeded at 75 pounds to the acre last September 12, after the lawn had been disked, plowed, leveled, and treated with ground limestone at the rate of 2 tons, and 5-10-5 fertilizer at the rate of 1,000 pounds to the acre. Favorable rains brought the grass up within 7 days. It remained green and thriving through a 32-day drought which followed only 3 weeks later. The root system averaged 7½ inches in length at the end of 2 months. The lawn was treated with 100 pounds of ammonium nitrate to the acre early in December and again late in March. It was mowed at 2½ inches for the first time in March. Specialists at the Station believe the alta fescue will provide a green turf all year even during summer droughts. Crabgrass doesn't have a chance.

This project is the first in a long-range plan to establish large areas of adapted turf grasses at the Station for demonstration and study. The work is under the direction of Dr. Fred V. Grau.

Against cancer

LOUIS A. PINCK, associate chemist in the Division of Soil Management and Irrigation, and an employee of the Department for 22 years, has attracted attention of research men with a working hypothesis on the origination of cancer. Published by the New York Academy of Sciences, in February, under the title, "A Biochemical Hypothesis of the Genesis of Cancer," it is advertised by the Academy in the April issue of the American Scientist.

The advertisement says in part:

The author's primary aim is to demonstrate why even the most minute quantities of carcinogens are active in inducing cancer, and, if possible, to explain the phenomenon of metastasis. His research is based on a careful survey of previously published litera-

ture in the field and is developed into a complete biochemical theory to account for the carcinogenic nature of various well-known substances. An attempt is made to point the way to a rigidly scientific method of approach in the study of chemotherapy, according to which it would be possible to predict which compounds are potentially carcinogenic and which are not. A complicated chain of biochemical reactions is introduced and explained at length by several dozen structure drawings. 18 pages, illustrated. 50 cents.

Brief but important

Retirement system program

Office of Personnel is developing a program to familiarize employees with the benefits they can obtain under the new Federal Retirement Act. An effort will be made to portray these as a factor inducing candidates to seek appointment in the Department, and to demonstrate that the retirement benefits are an important element in career service and an inducement to remain therein. There are distinct advantages in having employees appreciate also the benefits of early retirement, so that they may plan their retirements at times most advantageous both to themselves and to the Department. Each agency will designate advisers on this program and such informational material will be developed as is required.

Tree-planting record

Forest Service says that tree planting on farms and State and national forests, and other public and private forest land, will attain a new record this year. This estimate was announced in connection with the celebration of Arbor Day. Estimates from 43 States show 1948 planting goals of approximately 220 million seedlings, as compared with about 91 million last year.

Kotok to Brazil

Assistant Chief E. I. Kotok of Forest Service recently attended the International Forestry and Forest Products Conference for Latin America, held at Tetesopolis, near Rio de Janeiro, Brazil. This is the second in a series planned by FAO, the first of which was held in Czechoslovakia, in 1947. Eighteen Latin-American countries, and four other countries with national interests in the forests of this region sent representatives to Brazil.

Dr. Aldo Leopold

Dr. Leopold, forester and nationally known authority on wildlife management, died April 21, aged 62, while helping neighbor farmers fight a grass fire near his summer home in Wisconsin. He was with the Forest Service from 1909 to 1927. A graduate in forestry from Yale, he entered FS as a forest assistant, served in various capacities on western national forests, was Supervisor of the Carson National Forest, Assistant District Forester for the Southwest, and, from 1923 to 1927, Associate Director of the Forest Products Laboratory. He left FS to make a 3-year survey of game resources for the Sporting Arms and Ammunition Manufacturers Institute, and since 1933, had been Professor of Wildlife Management at the University of Wisconsin. His book, Game Management (1933), is a classic in its field. Dr. Leopold was a pioneer advocate of the preservation of wilderness areas. He laid the foundations for much FS wildlife-management work, and his contributions to the whole field of wildlife management and natural-resource conservation were great and far-reaching.

Soil conservation

FAO Agricultural Study No. 4 is entitled "Soil Conservation, an International Study," and is priced at \$2. Thomas B. Chambers, J. Gordon Steele, and Charles E. Kellogg of USDA are contributors.

RMA advisory committee

The National Advisory Committee met in Washington April 15-16 to discuss policy and objectives under the Research and Marketing Act of 1946. The Committee's statement will be found in No. 834, available from Press Service, USDA; *write instead of phoning, please.*

The egg and us

Last year the hens set an all-time record and the poultry business ran up a total of 3 billion dollars, 2 billion for eggs, and 1 for chicken meat. California was the only State listed as a leader in both egg and broiler production.

All farmers not rich yet

If you share the fairly common delusion that all farmers are rich today, better read *Many Farmers Not Prosperous* by John Heilman, in the Agricultural Situation for March-April 1948. This periodical is published by the Bureau of Agricultural Economics.

Shark meal

It may never have come to your ken, but shark meal as a livestock feedstuff high in crude protein content, has been produced in Florida and along the Pacific coast in considerable and increasing quantities during the past 7 years. If you would like to know more about its composition, our *Journal of Agricultural Research* for May 1-15, 1948, contains an article on that by two staff members of the Florida Agricultural Experiment Station. It looks as if some sharks come to a good end now.

USDA's medical officer

Dr. Melvin T. Johnson, who has been serving as Regional Medical Officer of Civil Service Commission at St. Paul, on May 1 became Medical Officer of USDA and Chief of Personnel's Division of Employee Health, the first to fill this post recently created legislatively. He is a graduate of Iowa State, took his M. D. there also, and his Master's in Public Health at University of Michigan. He has had a wide variety of experience. He will cooperate with Public Health Service in preparing programs for field employees.

Folic acid

The occurrence of this newest B vitamin was suspected at Cornell in 1938, when chicks refused to grow unless their feed contained some then unknown vitamin; a research group at California reported the same finding almost simultaneously. On testing foods it was discovered that dried brewers' yeast, liver, and green plants contained the substance and, in 1940, workers at University of Missouri discovered that the substance also prevented anemia. Soon many other laboratories took up the chase, and bacteriologists at University of Texas extracted the vitamin from spinach, naming it folic acid because green foliage appeared to be a rich source. In 1943, the yellow crystalline acid was isolated from liver by two research groups at two different pharmaceutical concerns and, in 1945, its structure was finally determined. Today folic acid does as good a job on the anemia or pernicious anemia as does liver extract—but it fails to cure the nerve disorders characteristically associated with that disease. It also corrects the anemias of sprue and many other conditions.

Teuton's McGinty

Frank L. Teuton of Bureau of Agricultural and Industrial Chemistry now has in Thomas F. McGinty, of Clemson, S. C., an aid in disseminating information about the work of his bureau, its four big Regional Research Laboratories, and its field stations. McGinty was born in Colorado, graduated from University of Missouri, worked for a short while with Ernie Moore in prewar BPI, rose from private to major in the Air Force during the war, and has taught since at Michigan State. His father, R. A., is vice director of the South Carolina Agricultural Experiment Station.

Master molecules

At the recent spring meeting of the National Academy of Sciences, Prof. George W. Beadle of California Institute of Technology spoke on Master Molecules in Living Systems, and described the genes as the master molecules. They exist in the nucleus of every living cell, control inheritance, determine the nature and shape of living organisms and their life processes, and even the functioning of the mind. Under the new composite evolutionary theory presented by Professor Beadle, an organism can either increase its own complexity to the point where 10,000 genes are involved in intricate interrelated activities, making an extremely complicated structure, or it can go in the direction of greater simplicity, learn to get along without the complexities, and wind up a virus—really a living molecule—capable of making plenty of trouble for complex organisms like human beings. Hence evolution can progress either toward greater complexity or enhanced simplicity.

Buyer's guide

Miscellaneous Publication 167, revised for issue in February, is A Fruit and Vegetable Buying Guide for Consumers, prepared in the Fruit and Vegetable Branch of PMA. In addition to certain general information about markets, grades, prices, and the deterioration of fruits and vegetables, it includes valuable over-all hints, and specific hints on purchasing particular fruits, vegetables, and melons, all of which will be helpful to all consumers.

Feeding children

A new booklet, Foods Your Children Need, may interest some of you—especially in that it can be procured free by sending your request to Children's Bureau, Federal Security Agency, Washington 25, D. C.

How many of us?

Every now and then someone asks how many employees there are in USDA. As of March 31, full-time employment within continental United States was 51,159, though 71,641 was the total employment figure, both full- and part-time. Employed inside the Washington, D. C. area—10,287, and outside of it—40,872. So you can see why we always include the field when preparing copy for USDA; it is the dog that wags the tail. The turnover rate, excluding the separation of temporary personnel and the separations due to reduction in force, was 4.7 percent for the third quarter of fiscal year 1948.

Corn drying

As we have mentioned before, the first investigation authorized under the Research and Marketing Act of 1946, was a project for drying high-moisture ear corn. Now increases in value far in excess of fuel and power costs have been obtained with experimental driers using forced heated air. For more details about this cooperative project between USDA and the Corn Belt State experiment stations, write Press Service, USDA, and ask for No. 876.

Low-altitude dusters

Aircraft do not fly very high when used for spraying or dusting. You may be interested in the March 1948, processed publication from Bureau of Entomology and Plant Quarantine, EC-2, Aircraft for Spraying and Dusting. In this connection you might also like to hunt up the article headed "Aircraft Attack on Locusts," by D. L. Gunn of the Anti-Locust Research Center in London, which appeared in Nature (London) for March 6, page 342.

Foot-and-mouth

A new law which cleared the hurdles in April authorizes USDA to establish research laboratories and perform research, in the United States or elsewhere, on foot-and-mouth disease and other diseases that may constitute a threat to our livestock industry. It prohibits the introduction of live foot-and-mouth virus to the mainland of the United States but permits it on certain coastal islands under specific limitations. It authorizes the employment of scientists, without regard to the Classification Act—not to exceed five in number and at pay not in excess of \$15,000 a year. It authorizes appropriations and also use of funds otherwise available for control or eradication of the livestock diseases mentioned.

AERA

That is the Agriculture Employees Recreation Association; it is our new council of agency recreation associations. It seeks to encourage the formation of recreation associations within each agency with sufficient employees to make this worthwhile—PMA, SCS, and BAE are already active in membership campaigns and P&O, Inf., and Pers. are not far behind. AERA is open to anyone employed in the USDA buildings or in the Washington area, even though not on the Department payroll. *You field people should be interested; this is something you may want to emulate.* For mimeographed matter on AERA write Charles H. Cunningham, Welfare Association, USDA, Washington 25, D. C.

They live and breathe

Seed, we mean. Each kernel of grain in storage is a living plant carrying on its life processes; when dry and cool it may become all but dormant, but under warm, moist conditions it becomes active again. In doing so it loses weight and, under extreme conditions, may even sprout and become unfit for storage. Hence shelled corn containing 15-16 percent of moisture may heat and suffer quick damage if stored in a tight bin in summer, though this may occur only at 20-percent moisture in winter. Thirteen percent of moisture is about the upper year-round storage limit for the central Corn Belt.

Nitrogen fixation

Peas, soybeans, clover, alfalfa, and other legumes, or pod-bearing plants, have the ability to convert nitrogen of the air into forms which can be used by plants of great economic importance. This nitrogen restores fertility to the soil after corn, wheat, or other crops have drained it. Bacteria in nodules on the roots of the legumes are co-partners in the process. Now Robert A. Burris and Perry W. Wilson of the University of Wisconsin have further unraveled this process, using nitrogen tracer atoms. They have proved that both root-nodule bacteria and leguminous plant are essential to the process. The bacteria have a particular affinity for ammonia, and will switch to it from nitrogen immediately it escapes into the atmosphere. The nitrogen proves to be especially concentrated in two protein building-blocks, the amino acids glutamic and aspartic.

Farmers' organizations

"American Farmers' and Rural Organizations" is the title of a new book by David E. Lindstrom, professor of rural sociology, College of Agriculture, University of Illinois, issued by the Garard Press, Champaign, Ill., at \$4.50.

Danger!

So you thought making explosives was dangerous work? Well, you're wrong. Assistant Secretary of Labor John Kmetz recently told the Hampden County (Mich.) Safety Council that, during 1947, the explosives industry had the lowest accident frequency rate of any industry in the Nation. The most lethal occupation was agriculture with 4,500 fatalities, a most unenviable distinction.

"Fire!"

This is the name of a novel by George B. Stewart, published from Random House, New York City, at \$3 a copy. According to the reviewers it may or may not be a good novel, but it is positively a spectacular and impressive account of great forest conflagrations started by human carelessness or by lightning. It provides an illuminating picture of the dramatic and dangerous work performed by Forest Service personnel during forest fires and is, for this reason, highly recommended to your attention.

Those atoms again

For some time we have patiently been reading books about the twentieth-century atom, atomic energy, atomic power, isotopes, and atomic piles. Some we have recommended. Now we honestly believe that the best of them all is Explaining the Atom, a Viking Press book by the late Selig Hecht, noted Columbia University biophysicist and, early in life, an humble employee of USDA. If you remember even vaguely from freshman chemistry such words as atom and molecule, this book will do the trick of explaining the modern atom to you, in all its ramifications, painlessly, stealthily, and authoritatively.

Big farm—little farm?

The winter 1947-48 issue of The Land contains an informal debate in two articles, one being The Case Against Farming as a Big Business, by Ralph Borsodi and the other, Make Mine Big, by Ladd Haystead. Better look them up if you have missed them so far. Also browse around the issue a bit to find out about Dr. Hugh Bennett's illness and magnificent recovery, after his trips to Africa and Brazil—he is the man who ate 78 oysters and then made a speech in Hartford County, Md., on December 16, 1944. You will also discover in this issue some pleasantly readable material about Walter C. Lowdermilk. Wish The Land reached us earlier; then we'd tell you earlier! Library gets this graceful periodical.

MAY 24, 1948

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USDA

FOR JUNE 7, 1948

NEW SECRETARY

PRESIDENT TRUMAN made another career Government employee a member of his Cabinet when he promoted Assistant Secretary of Agriculture Charles Franklin Brannan, to be Clinton P. Anderson's successor as Secretary. Extremely popular within the USDA, Mr. Brannan carries the good wishes of all his fellow employees as he assumes office. He became Assistant Secretary in April 1944, under former Secretary Wickard.

A native of Denver, born August 23, 1903, Mr. Brannan graduated in law at the University of Denver. After graduation he practiced law in Denver, specializing in irrigation and mining, until he entered public service as Assistant Regional Attorney for Resettlement Administration, in 1935. Two years later he became Regional Attorney for Office of the Solicitor, USDA, in Denver and, in 1941, Regional Director of Farm Security Administration, with headquarters in the same city. Until recently he was part owner of a cattle and grain ranch in Yuma County, Colo.

In April 1944, he came to Washington as Assistant Administrator of FSA, and within two months became Assistant Secretary. Patient, courteous, and uniformly affable, he has served with great zeal and industry in charge of many and varied policy and program activities. Throughout his career his chief interest has been making the maximum wise use of our land, forest, and water resources. He supervised the preparation of the USDA recommendations for a long-range farm program, and has been acting as Director of the Office for Food and Feed Conservation. He has also handled several important international assignments.

When he was nominated for the Indian Claims Commission, in 1947, Secretary Anderson asked that his invaluable assistant remain with him and the nomina-

Foreign salesmen

SPECIALISTS OF the Office of Foreign Agricultural Relations are busy, under the Research and Marketing Act, investigating foreign market outlets for U. S. farm products of which there is or may be a surplus. Studies are made abroad of opportunities to create or enlarge export demand for such commodities as cotton, rice, tobacco, fruits, and potatoes. Production developments in comparative areas and potential competition to domestically produced tree nuts are also being investigated. The information obtained is available to all U. S. producers and trade representatives interested in the crops involved.

For instance, Dr. Ide P. Trotter, on leave as Agricultural Extension Director at Texas A&M, is studying conditions in the Far East affecting foreign markets for our cotton. P. K. Norris, FAR cotton specialist, has made a preliminary investigation of foreign cotton markets in Europe. Dr. J. Norman Efferson, marketing specialist on leave from Louisiana State University, is in the Far East investigating foreign markets for U. S. rice, and Walter Schreiber, FAR fruit and nut specialist, is in the Mediterranean area obtaining first-hand, seasonable information on production and marketing conditions there, which are of value to our fruit and nut industry. Related studies have been made abroad in regard to fruit by Frederick A. Motz; tobacco, by Clifford B. Cheatham, Jr., and J. Barnard Gibbs; and potatoes, by A. E. Mercker.

tion was withdrawn. At a press conference he held immediately after his nomination Mr. Brannan said: "I am a great admirer of Mr. Anderson. He did a wonderful job as Secretary. I think it best to keep his program going." The Senate approved this nomination May 28, without debate. Secretary Brannan took the oath of office June 2.

Long-range trends

OVER A YEAR ago the House Committee on Agriculture began extensive hearings on a long-range agricultural program. Chairman Clifford B. Hope of the Committee recently asked the Bureau of Agricultural Economics to make a study of economic trends likely to affect agriculture during the next quarter century. The Committee on Agriculture has published this "Study of Selected Trends and Factors Relating to the Long-Range Prospect for American Agriculture," but copies are rare, so a few of the facts therein will be summarized here.

Farmers now get about 2½ times as much for their products as they did in 1935-39, but our 1947 per capita disposable income (personal incomes less personal taxes) averaged 240 percent of the 1935-39 average and, since our 1947 population was 12 percent above prewar, this means a real rise of 265 percent in disposable income, and that is the primary factor in the rise in farm prices. Our population might well rise to about 174 millions by 1975, a gain of 20 percent over 1947, and farm output may climb 25 percent, given favorable economic conditions. Per capita food consumption may also rise slightly by 1975.

Farm population will probably decline about 13 percent below present levels, to 24 millions in 1975, a decline that would be associated with decreasing need for farm workers because of increased productivity per worker, per acre, and per animal, and further mechanization. The average size of farms will continue to grow, and part-time farming of small acreages will increase. Future farm prospects rest on three major variable factors: Employment, the general price level, and foreign demand. These are hard to appraise.

However, employment levels as low as those of the 1930's are not likely to recur. Prices, now being high, are not likely to level off to the bottom of the 1930's. Foreign demand rests on our national policies, the progress of economic recovery in Europe, and world trade policies. But the world must have our agricultural products, food especially, if prewar standards of consumption are to be restored. That greatly condenses the report, which Chairman Hope pronounced "an excellent piece of work."

World food crisis

A summary of Secretary Anderson's speech. The World Food Crisis and American Agriculture, before the Wharton School of Finance and Commerce, is available, if you write Press Service, USDA, and ask for No. 946.

Let there be Yearbooks!

WE HAD A CHAT with USDA's Yearbook editor (Alfred Stefferud) the other day and learned that in order to get a volume out annually he has to juggle not one but three books at the same time. He was putting to bed the 1948 Yearbook (on grassland farming), on which first plans were made 2 years ago and for which appropriations were made a year ago—after actual work was well underway. Costs of the dozen things that make a book—ink, paper, cloth, time—have spiraled since then. But not so the law that requires him to send 241,000 copies to Congress, nor the Yearbook appropriation.

Also, the day we talked with him, he was getting the first manuscripts for the 1949 edition, on trees and forests, which will be out next spring—if his supply of aspirin holds out. He did not know how much money he would have for the undertaking nor how far it would go in the period of active production, but he was nevertheless figuring on how many pages he would have to have for the 600,000 words (enough to fill four average books) he was expecting, family and size of type for best displaying the material he's quite excited over, possible changes in art work and charts and tables, schedules for getting to and from the printer the copy and the proofs. He is not planning on annual leave this summer.

His third project is planning the 1950 book with the help of the Yearbook Committee. The tentative idea, when we saw him, was for a good look at agricultural chemistry, but the slant, approach, and boundaries must come after committee meetings and as much reading as he can do on a subject in which he could do no better than a weak C in college. But, regardless, before the summer is over and while he is editing the material on trees, he and the committee members will have to outline the 1950 book, integrate its component segments, make the assignments, and watch developments, so that the most important of the workers on the Yearbooks, the writers, can get their material written, approved, and delivered before the crocus blooms again.

All the while, the editor cannot forget the 1943-47 Yearbook. A year after its publication, he still gets handfuls of letters about it that require answers—from people who want to use parts of it in books; from people who like it; and from farmers, libraries, ex-GI agricultural students, county agents, foreign ministries of agriculture, teachers, and others who want copies. (The stock reply: Ter-

Greetings from W. Va.

"THROUGH RESEARCH to Better Farming," the annual report of the West Virginia Agricultural Experiment Station, C. R. Orton, Director, was mailed in by Editor Gerald Jenny to prove that his State has taken to heart Washington admonitions to write simply and use short sentences. We found the report rather more engrossing than most we have seen and, man and boy, we have seen hundreds of them during the past 35 years. The information is there, it is readable, the heads are not just too cute, and truly fascinating items crop out every now and then, such as the use of apple powder to cure the digestive disturbances that afflict children—who probably ate green apples in the first place.

Seems that West Virginia experimenters have found healing balm in mellow apples—peeled, cored, and grated to pulp—for youthful diarrhea, et al. It takes 3 to 12 medium-sized apples daily to appease the youngster's digestive tract—depending on the size of the patient. Two days of nothing but apple pulp and weak tea makes him whole again. The pulp navigates the intestines unchanged, but cleanses and removes poisons en route. The tannic acid and pectin in the pulp prove beneficial, but there is more to it than that. For more details on this new boon to white rats and children we must refer you to Gerald Jenny.

Then there is apple color—you see how you get tangled up in a subject in this report? Seems other West Virginia scientists boiled down great masses of apple peelings, making an aroma so appetizing Gerald ate two lunches every day this went on, and identified the chemicals which gave attractive ripe apples their cuticular allure. Then they found out how to spray the leaves of apple trees with a chemical which brings out the red coloring matter on the apple cheek. Now they are investigating to be sure that such tampering with nature's methods doesn't injure the edible apple. But we must leave them engrossed in the inside of treated apples and hope Gerald can tell us next year what goes on there.

ribly sorry; we have no more. Better try your Congressman or—with \$2—the Superintendent of Documents, but don't be too hopeful, because apparently even the second reprinting is almost exhausted.) That's the nicest part of this editor's job. He knows in advance that he is working on a book that is bound to be a best seller.

Brief but important

"I like USDA because . . ."

Well, do you? Maybe you don't. Then you can sit down and write out in 25 words "Why I don't like USDA." We'd like to hear from you on this momentous question. If your sentiments are astringent or corrosive, put them down on asbestos, but send them along anyway. All editors are blind when they lack guidance from readers.

Institute of Cooperation

The twentieth annual meeting of the American Institute of Cooperation will be held August 30-September 2, on the campus of the University of Massachusetts, at Amherst. The majority of the sessions are designed to evoke discussion from the floor. For information on reservations write Prof. Roland H. Barrett of the University. It is hoped that many from USDA will participate.

First place

First place award for radio education programs was given this year by the Columbus Institute for Education by Radio, at Ohio State, to a 10-minute pick-up from the Northern Regional Research Laboratory. The program was an interview with Director G. E. Hilbert, and Drs. J. C. Cowan and R. W. Jackson of the lab. It concerned recent developments in the lab's field of research and formed part of the National Farm and Home Hour. It shared first-award place with "The Garden Gate," a CBS show fed the network from WLAC.

C. C. Bratley dies

Dr. C. C. Bratley, Assistant to the Administrator of the Research and Marketing Act, and one of the Nation's outstanding fruit and vegetable pathologists, died of a heart attack May 9. Prior to his transfer to RMA, in August 1947, Dr. Bratley had been with the Bureau of Plant Industry, Soils, and Agricultural Engineering for 15 years, with headquarters in New York City. Born in Wichita, Kans., in 1903, he graduated from University of Florida in 1925, and took his doctor's degree later at Cornell.

Training in writing

The Research Interpretation Council, Auburn, Ala., gives training in how to write for the public. This Council is interested in extending this training to Federal agencies throughout the Southeastern Region. The Regional Council is headed by Dr. Paul Irvine and is financed by General Education Board Funds. Some of our field offices are taking advantage of this service. For further details, write Dr. Paul Irvine, Research Interpretation Council, Alabama Polytechnic Institute, Auburn, Ala.

Research achievements

Research Achievement Sheets 89 (C) and 90 (C) have been issued by the Agricultural Research Administration. The first deals with work carried on at the Northern Regional Research Laboratory which saved millions of dollars for the Government by the development of improved and coordinated analytical standards for the chemical analysis of soybeans. The second deals with work carried on by three bureaus of ARA in the Western Regional Research Laboratory, which made possible a wartime production of 1.4 billion dollars worth of dehydrated vegetables, fruits, and eggs for the armed forces and lend-lease, of which at least half a billion dollars worth must be credited to the availability of these research findings and their prompt industrial application.

Fruit and vegetable research

A summary of research on fruits and vegetables under the Research and Marketing Act, for the fiscal year 1947-48 is available from Press Service; write for No. 891.

Citrus preferences

A new report, available from Information Division, Farm Credit Administration, tells what kind of citrus juices wholesale buyers prefer. For instance, in all areas, except the South, 46-ounce cans move best and about two-thirds of those interviewed prefer products from processors having continuous USDA inspection at their plants. On the whole, buyers depend largely on taste and sight to determine quality. Get the report itself for more details.

"Basic Fish Cookery"

This is the title of a new, fully illustrated cookbook issued by Fish and Wildlife Service, Department of the Interior, Washington 25, D. C. Single copies free on request—as long as they last.

Meat and eggs

Experiments carried on in the Bureau of Animal Industry indicate that meat provides adequate amino acids for growth when generously served the youngsters at meals. But when little meat can be used, the protein in their diet may not be adequate in all amino acids, and it is a wise precaution to supplement with eggs to round out the variety of those available.

Farm program fan

Radio Farm Directors who attended a Washington meeting arranged by our Radio Service in April, discovered at the White House that the President is a farm program fan. The one he hears is at 5:30 a. m.

Why FHA now?

City folk sometimes ask why we need the services of Farmers Home Administration these prosperous times. The answer is that all farmers are not rich yet, and that small operators lack skill, equipment, and resources generally to cash in on the selective rural prosperity going around.

Disease resistance in plants

A summary of the December 11, 1947, British Royal Society symposium on "Physiology of Resistance to Disease in Plants," will be found on pages 422-23, *Nature* (London) for March 20, 1948.

Wharton retires

William R. M. Wharton, for 28 years chief of the Eastern Food and Drug Inspection District, retired April 30. He entered the USDA on May 28, 1907, as one of the original force of inspectors appointed under the Food and Drugs Act of 1906, and served with high efficiency in New Orleans and in St. Louis before assuming his New York position in 1928. A native of Maryland, he took his B. A. at University of Delaware and his M. A. at the then Maryland Agricultural College, now Maryland University. He taught chemistry and was assistant State chemist of Maryland before entering the Department.

Forests and conservation

Those interested in our forests, and in conservation in general, are tipped off here with not to miss Bernard De Voto's "Easy Chair" in Harper's Magazine for May, where he started off with Gifford Pinchot's autobiography, "Breaking New Ground," and proceeded to discuss relevant subjects in an incisive and stimulating manner.

Beliefs

We are indebted to John Butler Yeats for the following nugget which he embedded in his Essays Irish and American: "When a belief rests on nothing you cannot knock away its foundations."

Grasshopper control

There is a new fact sheet available from Office of Information called "Save Crops by Controlling Grasshoppers"; it is summarized in Press Release No. 952.

Weed control

A new fact sheet is available entitled "Weeding Small Grains and Corn with 2,4-D"; it is summarized in Press Release No. 951 and is available from Office of Information, USDA.

Good health for spuds

USDA Circular 764, Production of Disease-free Seed Potatoes, by T. P. Dykstra of the Bureau of Plant Industry, Soils and Agricultural Engineering is well organized, easy to use, and quite complete.

25th anniversary

The June issue of the *Journal of Home Economics* will contain a few pages of text and pictures in honor of the twenty-fifth anniversary of the Bureau of Human Nutrition and Home Economics, and showing that the first stirrings which led to its creation and work go back a full century, though the first appropriation in this field was one for \$10,000, made in 1894.

Light Is Good

One of the last talks delivered by Mr. Anderson before he ended his term of office as Secretary was entitled "Light Is Good," and was made before the Friends of the Land at Columbus, Ohio, May 3. You will find in it much helpful information about conservation. When you write Press Service, USDA, ask for No. 902 to procure this speech.

Rice oil

That's it—rice oil. According to Director Walter M. Scott of our Southern Regional Research Laboratory, salad or cooking oil may in time be prepared from the bran and polish removed from rice in shelling. Indeed as much as 20 million pounds of high-grade oil might be recovered annually from our domestic rice crop. The newer knowledge of oil-seed processing makes this a distinct possibility of the near future. But almost no study has been made on the processing or industrial uses of this oil and its byproducts.

Farming is dangerous

New York Herald Tribune calls farming a most dangerous trade in an article on farm accidents and farm hazards. The annual agricultural mortality rate due to accidents is 53 per 100,000 workers, whereas in all other industrial groups the average is only 31. National Farm Safety Week (July 25 to 31, 1948), jointly sponsored by USDA and the National Safety Council, is the highlight in a year-round accident-prevention program aimed at making every American farm as safe as possible, thereby making farm life safer, happier, and more prosperous. USDA's forthcoming Fact Sheet on National Farm Safety Week will show that during an average year: (1) 1 out of every 4 US farm residents will suffer a disabling injury; (2) a disabling injury will strike some farm resident every 19 seconds, day and night; (3) the total costs of accidents involving farm people or property is \$1,050,000,000 or \$35 per farm resident.

ARE YOU SECURE?

The Secretary through Memorandum No. 1209, March 17, 1948, called on all agencies to bring to your attention the advantages of using the Pay-Roll Savings Plan for the purchase of the safest, surest, most profitable investment of all—U. S. SAVINGS BONDS. The Security Loan Campaign opened April 15 and closes June 30. If you haven't allotted all you can to "Take Home Savings" get a card today and invest in America's Security. It's your security too, you know. U. S. Savings Bonds' yield is sure and the value guaranteed. There is no better liquid asset you can hold for profit—or use in emergency. Save something from every pay in the safe and easy way.

Exterminate editors?

Some years ago the editor of *USDA*, who was then Editor of Scientific Publications of USDA, delivered a talk before an annual meeting of the Agricultural College Editors, entitled "Should Editors Be Exterminated?" It dealt in both humorous and serious vein with problems faced by the editors who prepare scientific and technical manuscripts for print. It reverberated widely and is still remembered, but the speaker lost all trace of it until just recently when he found a stray carbon. Because so many still ask whether copies of the talk exist, it has been condensed somewhat and a stencil cut. If you want a copy write, please do not phone, T. Swann Harding, Office of Information, USDA, Washington 25, D. C., and you will be served.

"Wash sales"

USDA for April 26, carried a front-page article on how the activities of our Commodity Exchange Authority added at least 5, and possibly as much as 20 to 25 million dollars to Treasury tax collections. On May 4, a new Department regulation was announced further to safeguard the markets against wash sales and fictitious transactions in commodity futures. It follows recommendations made December 4, 1947, after CEA investigations showed that a large number of completed speculative transactions in futures were being held open, apparently to evade income taxes. The new regulation prohibits holding open both sides of a trader's offsetting positions in the same future after trades have been completed. Bona fide hedging operations and sales during a delivery period for the purpose of making delivery are excepted. The regulation becomes effective tomorrow, June 8.

"One-man USDA"

Ladd Haystead, now described by his latest publisher as a "one-man Department of Agriculture," counts that week lost in which he doesn't get out a new book. This time Pellegrini & Cudahy, Inc., 65 5th Ave., New York City 3, announce that they will exchange for the small sum (no sum buys much these days) of \$3.50 a new book by Ladd entitled "The Squires Can Take It." A great many urban county agents will be interested to know that the book is a guide for city farmers, and is designed to show everybody that farming is neither a bleak nor a grim occupation, but a joy forever. The book contains—among others—chapters headed: Don't Romanticize—Mechanize; Dream Farming; Goodbye, Mr. Weed; and A Crop of Conclusions. It is said to be a palatable, if not potable, admixture of sound information, commonsense, and good humor, and will undoubtedly advance the techniques of front-porch farming several decades.

Director of Personnel T. Roy Reid's letter on Prohibited Political Activities was dated April 26. If you are in doubt as to the propriety of any proposed political activity on your part better ask your personnel officer to let you see this letter, or refer to Chapter 57, Title 8, Administrative Regulations. If you want full coverage on details get from the U. S. Civil Service Commission its pamphlet, Form 1236.

Perfect spud

British scientists are in search of the perfect spud, though, rather naturally, they refer to it as the potato. They hope one of a thousand little clay pots now in a Cambridge laboratory will produce it by 1950. It must resist blight, Britain's worst potato scourge. Thousands of crossings have been made of 1,500 different types of wild South American potatoes.

Capital farm

Alfred Heitmuller, Washington, D. C., resident, celebrated his ninety-ninth birthday the other day. He attributed his longevity to farm life in youth—say up to 60 or 70. His farm was on 14th St. in Washington and extended from Rhode Island to Vermont Aves. He often observed Lincoln driving by. Later he moved way out in the sticks to Brentwood and lost all touch with urban life.

Science and society

Our friend, C. D. Darlington, F. R. S., now Director of the John Innes Horticultural Institution, England, the first Director of which was William Bateson, who fathered the modern science of genetics and invented the name for it, recently sent us a slim paper-bound volume entitled "The Conflict of Science and Society." It comprises his Conway Memorial Lecture delivered at Conway Hall, April 20, 1948, and is incisive, vigorous, at times astringent, but always informative and stimulating. We sent the booklet to the Library in case you want to see it.

Poetess Weiland

Somewhat belatedly let us make amends for the absence of Miss Bertie F. Weiland, Farmers Home Administration, from the "Poet's corner" paragraph published in our April 12 issue, page 3. Miss Weiland wrote 42 of the 300 pieces in the book, "Poetry from the Potomac", perhaps the largest number of contributions by any one of the 37 co-authors thereof. This is an anthology of verse by The Federal Poets of Washington, D. C., priced at \$3 in the book stores.

Job ahead

Soil Conservation Service says that, while 20 million acres annually are being brought into its conservation program, that is only one-third the rate required to offset erosion damage and, if only this rate is maintained, the U. S. can run into domestic food shortages by the turn of the century.

Accurate information

We have copies of a talk entitled "The Importance of Accurate Information," which was delivered several times before members of the USDA staff in Washington, D. C., in Peoria, Ill., and in Philadelphia. It deals with the history, functions, and responsibilities of the Office of Information, and with the duties of information specialists and editors and some of the things the public expects of them. It emphasizes the various measures taken by the Department to issue only accurate information, and why this is important. If you want a copy write T. Swann Harding, Office of Information, USDA, Washington 25, D. C., or phone Miss Arden, Ext. 4649.

On June 1, Mr. Thigpen, formerly Assistant Director of PMA's Tobacco Branch, succeeded C. E. Gage as its Director. A native of North Carolina, Mr. Thigpen attended Guilford College and University of Connecticut, took advanced study at Harvard, and did research at Massachusetts State before joining USDA in 1933. He entered AAA's Tobacco Section, transferred to CCC in 1942, as Assistant to the President, was in the Army from May 1943 until September 1945, when he returned to the Department to become Assistant Director of the Tobacco Branch.

Gage retires

Charles E. Gage retired as Director of the Tobacco Branch, PMA, on May 31, after 42 years of continuous service with USDA. Born in Nebraska and reared in Missouri, he has since 1909 been a resident of Virginia; he was educated in Missouri and in Washington, D. C., and entered Forest Service in January 1906. He transferred to old BPI 2 years later, then to Bureau of Crop Estimates in 1914, and, in 1929, became first chief of the Tobacco Section, Bureau of Agricultural Economics. Ten years later he became head of the Tobacco Division of Agricultural Marketing Service and, since August 1945, has headed PMA's Tobacco Branch. He is a leading tobacco authority.

FHA and James Archie

James Archie, South Carolina farmer who has risen from sharecropping to ownership of an 88-acre farm, through the assistance of Farmers Home Administration loans, was recently awarded a certificate of merit by the South Carolina Bankers Association for his outstanding soil conservation work. He lives near Chester, and is the first Negro farmer in the Catawba Soil Conservation District to receive this award. Since purchasing the run-down farm he once sharecropped, with FHA assistance, Archie has achieved a large measure of financial security, a new farm home, and what is essentially a redeemed, as well as a profitable farm enterprise.

"Agricultural Adventurers"

In 1347, King Edward III granted a license to certain citizens of York, England, to become Merchant Adventurers of York. Now there has been formed the Yorkshire Agricultural Adventurers, designed to recognize agricultural achievement, and membership is limited to those who have shown a spirit of adventure and enterprise in the field of agriculture. This spirit must be maintained by the Adventurers, and they must be prepared at all times to undertake experiments for the cause. They meet quarterly, discuss recent developments in farm science and practical farming—exchange experiences, and visit one another's farms. Hail to bucolic adventure!

Prepackaged vegetables

Our transportation and storage specialists have long known that prepackaged fresh vegetables keep from 2 to 3 times longer at 42° F. than if no attention is given refrigeration. A recent Research and Marketing Act project makes this more specific. Broccoli, brussels sprouts, and cauliflower were wrapped in different kinds of transparent film as harvested, and were kept at 67° and 42° F. The former approximates store temperature, the latter that of a home refrigerator. All wrappings offered some protection, some were much superior to others, and non-wrapped vegetables rapidly lost weight. But none of the prepackaged produce was salable after 4 days at 67°, whereas, at 42°, prepackaged cauliflower was satisfactory after 8, and brussels sprouts and broccoli after 11 days.

Assistant Director of Information J. H. McCormick is Acting Distribution Control Officer now, as Patrick W. Condon has been detailed to the Office for Food and Feed Conservation.

Paint out those weeds

In fighting lawn weeds there may come a time when most of the turf is free of them and only a few individual dandelions or plantains are to be found here and there, and small patches of the low persistent pennywort and chickweed. When 2,4-D is used as a spray it is likely to kill or damage the clover, which is often desirable in the mixture, and it may drift to other sensitive plants. To use 2,4-D effectively on small patches of the spreading weeds, says L. W. Kephart, weed specialist of USDA, a paint brush is a practical applicator that will not spread the herbicide beyond the spot to be treated. Unless the brush is reserved for this use (and not used for spraying insecticides and fungicides on other broadleaf plants about the place), it should be thoroughly washed out with soap and warm water and left to stand overnight in a quart of water to which a teaspoonful of ammonia has been added.

Theodore Venemann

Mr. Venemann died in Washington, D. C., May 11, at the age of 65. He had been retired from the Veterans' Administration since 1940. Born in Indiana and educated in forestry at Purdue, he entered Forest Service in 1908, and was assigned to the timber-testing laboratory in Colorado. He later headed the information unit of FS at Denver, but in 1918, became associated with the War Risk Insurance Bureau, a forerunner of the Veterans' Administration, with which agency he remained until his retirement.

What the press would like

A writer of agricultural editorials for a metropolitan newspaper told a group of USDA information people the other day that newsmen would be better satisfied if there were improved coordination between agencies, and they contradicted one another less in giving out information; if there were some central spot they could call to get answers to all questions, instead of having to phone 7 persons in rotation before they got the man who referred them back to the first guy they called; if some agencies did not try to oversell their activities; if more easily grasped summaries were published along with our longer publications, printed or processed. They like our tables, they do not find the figures used in our publications very impressive, and they are not usually stumped by material we regard as pitched at professionals. Such material is not, as we often think, unintelligible to them.

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USDA

FOR JUNE 21, 1948

Superior Accomplishments

THE FOLLOWING employees have been awarded pay increases for superior accomplishment:

Commodity Exchange Authority: JULIA K. JACOBSEN, Clerk-Stenographer, for outstanding performance of her stenographic duties in the preparation of numerous long and complicated tables, in addition to serving in a dual capacity by regularly assisting another section with stenographic work requiring exceptional speed and accuracy.

Farmers Home Administration: RAY M. HOUSE, Clerk-Typist, for outstanding cooperativeness with his supervisors and fellow workers and for constant perseverance and application to his duties. Mr. House has contributed greatly to the efficiency of office operation by clearing away a large volume of work which had accumulated in the past.

Forest Service: JOHN K. CROSS, Forestry Aid (Naval stores), for meritorious work beyond the requirements of his position in initiating and conducting a "show-me" trip and training session for all members of the Mississippi Forestry Commission personnel serving in the naval stores area. Mr. Cross also designed a simple gage for measuring tree diameters which was adopted by the American Turpentine Farmers Association. DANIEL E. GIBSON, District Forest Ranger, for exercising unusual foresight and initiative in the reanalysis of range survey data which led to the adoption of a plan to remove 19,700 sheep from the Hans Peak Ranger District by the season of 1949.

Production and Marketing Administration: BEVERLY M. THOMAS, Administrative Assistant, for initiating a method which greatly reduced the cost of processing vouchers under the Potato Purchase Program. Under Mr. Thomas' plan one voucher was issued for an amount that would formerly have required 101 vouchers. FRANK W. SCHULTZ, Cotton Technologist, for devising a method of using an electric split-bank adding machine in the tabulation-addition of year skein-strength and yarn-size data to replace former manual tabulation. It has been estimated that this method will save approximately 3½ man-hours per day at each laboratory.

Soil Conservation Service: ALVA C. BLAKEY, Cartographic Engineer, for developing a new method of making photographic mosaics which reduces costs, speeds, activities, and results in better photographic quality. It is estimated that \$1,500 is saved, per year, in his region by use of this process.

Remember these descriptions of accomplishments are summarized because of space limitations.

Liberty Hyde Bailey

A MAN AS young at 90 as Liberty Hyde Bailey is irresistably fascinating. On April 29, 200 of his friends, colleagues, and horticulturists from U. S. and Canada gathered at Cornell to celebrate his ninetieth birthday, which actually had occurred March 15. For, like some other kings, Dr. Bailey celebrates his birthday when it suits him, and on March 15 he was scampering about the West Indies, tracking down palms to add to the 200,000 plant specimens already in Bailey Hortorium, which he founded in 1913.

Dr. Bailey has had numerous agricultural careers. Described 60 years ago by a Detroit Free Press reporter as a shrewd scientific man who rose at unearthly hours and splashed about in dew and malaria, he has maintained his feverish activity to date. He founded our first college department of horticulture at Michigan State, then joined Cornell faculty in 1888, becoming dean of its College of Agriculture in 1903. He promised then to serve 10 years. He did and then quietly but firmly retired. Under his guidance, departments of plant pathology, plant physiology, plant breeding, and soil technology were formed.

Since 1913, Dr. Bailey has been busy with his plant collection, traveling widely and fast. He has written and edited more than a hundred books, including several definitive plant encyclopedias. He has been honored by many important botanical and horticultural societies the world over. He specializes in blackberries and palms and has the world's largest collection of the former. He still works early in the morning, and late in the evening, but dozes in an old rocking chair after lunch. He remains alert and nimble and, whether it is a ladder or a steep slope, he climbs it, reserving less active pursuits for his ever receding senility.

World War II Memorial

THE SECRETARY, in Memorandum No. 1208, March 15, appointed a committee under the chairmanship of Under Secretary Dodd, to consider a World War II Memorial to commemorate the USDA employees who lost their lives therein. The committee decided in favor of a memorial financed through voluntary contributions from *you*, wherever you are. A subcommittee of the original committee, with Assistant Director of Personnel S. B. Herrell as chairman, is to develop plans and ideas for action but it would, in turn, like to have *your* ideas on the type of memorial we should promote.

The subcommittee, as well as a Veterans' Advisory Committee, frankly leans towards the idea of a simple inexpensive plaque within the Department's walls, *plus* maintenance of a scholarship fund, the proceeds of which would be available for loans or grants to descendants of World War II USDA veterans, to aid them in securing an education. But the following have also been proposed and seriously considered: Construction and maintenance of a 4-H Club House at Beltsville, Md.; establishment of a fund to be used for the exchange of significant books and periodicals with schools and government officials of other nations; the establishment of a memorial fund to endow a chair in the USDA Graduate School, with the idea of periodically bringing in internationally known scholars and lecturers in physical and social science.

Then there is the obvious idea of a monument, a fountain, a piece of statuary, or a somewhat elaborate plaque for installation within the Department buildings. *But the important thing is what do you think?* You staff members of USDA are the persons who will be solicited for funds and who should be pleased. *Will you, therefore—now, before you lose your inspiration—write to Mr. T. Roy Reid, Director of Personnel, USDA, Washington 25, D. C., and tell him what kind of a memorial you favor?* If you like something different from any of the above, he'll be glad to hear about that too.

Achievement

Research Achievement Sheet 92 (0), procurable from Agricultural Research Administration, USDA, tells about work by the Federal Experiment Station in Puerto Rico, and the Soil Conservation Service, which has shown that tropical kudzu is an ideal legume for growing in the American Tropics to control soil erosion and to provide protein for livestock simultaneously.

Then—the Eastern Lab

IN *USDA* for May 24 we rather went overboard about the Northern Regional Research Laboratory at Peoria. Now, just back from Philadelphia, we are inclined to sound a trumpet for the Eastern Lab, its fine director, Percy Wells, and its hard-working, achieving staff. A most striking thing to a former chemist was the tremendous strides that have been made in chemical analysis. Analyses that took painful days and weeks in the labs of yesterday are carried on with all but magic rapidity by using the ultra-modern equipment and techniques to be found in these laboratories of tomorrow. Literally years of labor are saved and put to other good use. The spectroscope plays a vital part in this, as does also the electron microscope, and often a mere glance tells more about the intimate inner structure of a complex compound today than could be painfully learned after weeks of toil some years ago.

Other items that stick in mind: New and better methods have been developed for the extraction of rutin from dried buckwheat leaves. While buckwheat cakes normally come from the Japanese variety, the Tartary has been found best for rutin. It formerly went for chick-feed. But its rutin content remains high over a longer period, making the harvesttime less critical, it is more frost-resistant and richer in rutin. The primary use of rutin itself remains for the control of capillary fragility, which makes it possible to treat sufferers from high blood pressure with drugs that might otherwise themselves induce such fragility.

Then there is the complex project to determine what gives maple sugar and maple syrup their characteristic maple flavor. Maple sap tastes sweet but not "maply." How does the flavor get in? During the process of boiling down or when? Meanwhile apple flavor has been dissected by the lab's specialists into 34 constituents; this marks the greatest progress in this field since the long-gone days of Power and Chesnut in the old parent Bureau of Chemistry.

The vegetable waste investigations continue; commercial applications impend. Celery leaves, for instance, which are so largely thrown away, contain from 25 to 27 percent of high-quality protein. Leaves generally contain a protein of excellent composition and varying little in its amino acid makeup, no matter from which plant derived. The 10 amino acids essential for growth are always

present in good quantity, and the protein is similar to casein in feeding value. A new source of high-protein feed concentrates impends.

Not only did we actually peer through an electron microscope to see the shadow of a shadow which represented the very outlines of a protein molecule, we also saw protein crystals of phenomenal size in the laboratory where casein is being fractionated into its constituents, in the effort to correlate physical properties and chemical composition. Here too we saw protein fiber for paint brushes or fabrics actually being made by a machine. Elsewhere there is work on rubber substitutes, new and more durable coatings for metal and wood, lactic acid and its derivatives, and the difference in the very molecule of starches from different sources.

Yet another enthusiast painted an optimistic picture of a new project on wool grease, a long-neglected resource which promises in the not too distant future to give us special waxes, oils, fats, lanolin, cholesterol, and certain vitamins and sex hormones, in opulent quantities. Finally, the leather work intrigued us. Not only is canaigre a particularly promising domestic plant which may soon be induced to provide much of the tanning materials we now so expensively import, but there are new methods of tanning leather which render shoe insoles impervious to shrinkage, cracking, and curling, and which will soon give us improved shoe uppers as well.

As Al Jolson says, though, "You ain't heard nothing yet." Your head whirls with it, and you come away thrilled to be in the same Department where such things occur. But for details you'll just have to consult Frank Teuton of the Bureau of Agricultural and Industrial Chemistry.

Prudence Island

Prudence Island, in Narragansett Bay, Rhode Island, has been proposed by the Congressional delegation of that State as the site for *USDA's* recently authorized laboratory for research on foot-and-mouth disease. You will find details in No. 1061, available from Press Service, *USDA*; write for it.

Dry milk

We call your attention to a monograph recently issued by the American Dry Milk Institute, Inc., 221 North LaSalle, Chicago, entitled "The Dry Milk Industry, An Aid in the Utilization of the Food Constituents of Milk", by Hugh L. Cook, Bureau of Agricultural Economics, and George H. Day, Production and Marketing Administration. It is unique in representing the pooled resources of two Government agencies and an industrial organization; this makes it more definitive and useful than otherwise. The cooperative arrangement was worked out by Dr. F. L. Thomsen, Director of the Marketing Research Branch, PMA, and Mr. Roud McCann, Director of the American Dry Milk Institute, early in 1946

Testing! Testing!

ABOUT A MONTH AGO our Office for Food and Feed Conservation conducted two pilot programs in York and Lancaster Counties, Pa. One program was tested in both counties, and was designed to market more foods in plentiful supply. It was a good deal like the old Victory food-selection programs with which War Food Administration made people familiar during World War II, but it had been more thoroughly planned and better worked out in detail. The pilot test programs proved this.

In this program the *USDA* provided symbols reading "Banner Buy—A Plentiful Food," available on display cards of two sizes, one for store windows and the other for the counters where the foods were sold. The survey division of Bureau of Agricultural Economics cooperated by learning from a cross-section of 400 housewives in the counties whether they recognized the symbol and slanted their food buying accordingly. OFFC should have the answer to this test about the time this copy of *USDA* reaches you. It will then be ready to go ahead with the program in urban centers both regionally and nationally, wherever seasonal foods are in bounteous supply. The program involves the use of normal trade channels and benefits producers, distributors, consumers, and taxpayers alike.

The second program tested two different methods of distributing the new money-saving menu and recipe booklet, Money-Saving Main Dishes, through retail food stores. The York County test aimed to ascertain whether a write-in system of distribution proved preferable to distribution at point of food sale, as in Lancaster. Results later.

Savory vitamins

At the recent meeting of the American Chemical Society evidence was presented to indicate that vitamins have appetizing flavors and aromas of their own which stimulate the consumption of health-building and health-maintaining foods by animals and human beings. Vitamin C is said to stabilize foods and prevent the development of off-flavors; possibly the rich quota of C in paprika is what makes Hungarian goulash so palatable. Vitamin E is said to impart some of the taste to bread. Thiamine is described as having an easily detectable odor, a component in the aroma of foods like pork and wheat products, and capable of producing tempting flavors in certain nuts. Carotene, which the body converts into vitamin A, is also said to improve the flavor of foods in which it is found. Some experimental animals apparently are expert vitamin sniffers and maintain health and normal nutrition by following their noses and smelling out the right vitamin combinations in rations offered them.

Annual spud headache

POTATOES CONTINUE to be a problem this year, as they were last year—and the year before. Production for all 1948 early commercial potatoes is expected to be something over 93 million bushels, while the production goal of the Department was earlier established at 66,803,000 bushels. These figures cover the winter and early spring production of Florida and Texas, the late spring States and summer States, together with that of Long Island and Arizona.

The 1948 early potato crop acreage is about the same this year as last—or a shade less, but the acreage is distributed differently. There have been reductions in low-producing and increases in high-producing areas. These factors have been colored by a generally increased yield per acre. Contributing further to the surplus problem has been a generally late, cool spring which has resulted in an overlapping of harvesting dates, notably in some of the southeastern States like North Carolina and Virginia. These overlap with California this year.

Unlike the late potatoes, which can be stored, these early potatoes are highly perishable. They are thin-skinned, have a high water content, and require special handling. If they are left uncovered in the field under a hot sun, they become sunburned. Even with careful handling during the digging period, they must be moved swiftly or they will deteriorate. Increased freight rates have augmented the difficulty encountered this year in moving the early crop, particularly in States located at great distances from the large terminal markets.

The overlapping of harvesting periods in several States, coupled with higher production generally, has resulted in the acquisition by the Department of some new potatoes in carrying out its normal operations under the mandatory provisions of the potato price-support program. Most of the potatoes so acquired have been channeled into useful outlets.

Many 1947-crop potatoes acquired before schools closed for the summer vacation periods, were used in the School Lunch Program. Others were used in institutional feeding; some were converted into flour or dehydrated for export. Starch factories in Idaho utilized some and more were used for livestock feed and the manufacture of industrial alcohol. Actually export is the largest outlet for surplus potatoes with alcohol production next, then starch and flour production, school lunches, and livestock feeding, in that order.

The Department's purchase and diversion operation will continue to be employed in supporting the price of potatoes harvested until mid-September. At that time, as digging of the late, storable crop of potatoes gets under way, this method of price support will be supplanted by a loan program. Estimates are as yet unavailable on the probable total production of late-crop potatoes, but indications are that producers generally have remained within recommended acreage goals.

Acorn to oak

THE USDA WELFARE ASSOCIATION—of which you are a member, whether you know it or not, provided you work in Washington—started in a very small way during the effort to sell Thrift Stamps in World War I. Former Assistant Secretary Carl Vrooman was its first head, and Chief Clerk Reese succeeded him as president in 1919. But, in 1923, a group of employees who were experienced volunteer workers incorporated the Welfare Association mainly to provide emergency aid to financially embarrassed fellow employees. Each agency appointed a welfare committee and its membership comprised the Administrative Council.

Today the Welfare Association serves 7,000 meals daily, and innumerable snacks, from four cafeterias (the first opened in 1934) in South Building, two in Beltsville, two lunchrooms, two food carts, the executive dining room, and the conference dining rooms. It employs a year-round staff of about 150 and does an annual business of almost \$1,000,000! You are a shareholder in this million-dollar corporation. Much volunteer time and effort still goes into the Association's work and development. Annual net profits are divided equally between the United States and the Associates. During some recent war years as much as \$12,000 a year was paid into the Treasury as rent for space occupied in Government buildings, but last year the high wages and high food costs caused a loss of over \$8,000 or about \$1 per customer per year.

The Welfare Association seeks to serve food at low prices; it makes personal emergency loans reaching an annual total of \$15,000; it at one time paid the salary of the nurse for what has now become our official health program and emergency nursing service; it cooperates and assists in the establishment and promotion of recreational, educational, and cultural programs for employees.

Special languages

OUR MEETING reporter—we have found there are too many meetings for any one person to attend, so we attend a few of them vicariously now—tells us that many of those who attend meetings still speak special languages remote from realities of life, and all but incomprehensible. If someone from the floor asks one of these personages a simple question she turns to the authority at her right, if she is a chairwoman, and says: "Miss Y., do you have any reaction at this time?" It is impossible for such imposing individuals to say simply: "Well, Miss Y., what do you think about that?"

The climax was capped for a while by a long, abstract speech during which the speaker set up a multiplicity of complex categories. After he sat down a straightforward woman rose and said sharply: "I don't understand what you have been talking about at all!" The speaker rose in some disturbance and remarked, "Would you have me develop another construct of categories?" "No," said the woman, "Not at all. Just say what you have to say right out so that we can understand you." That broke up the meeting for the day, for apparently the matter could not be made plain.

For your further information the following expressions are still extremely popular: "patterns of attitudes," "selected areas of interest," "contribution at this time," "multidisciplinary approach," "implement," and "basic concept." Do you speak plainly, or do you use a special language too? We'd like to hear more about this from you.

From the beginning of World War II until this year it has paid the salary of a full-time Red Cross Activities Supervisor to assist USDA's Volunteer Red Cross Unit and, since 1946, it has employed a full-time Employee Activities Director. The Red Cross worker now has been made an employee activities assistant in the Office of Activities Director.

Undoubtedly you will want to know more about the Welfare Association than our constricted space will permit us to tell you here. Furthermore field employees should make it their business to find out what the Association does for Washington employees, as it should be possible for them to set up something similar in cities where the USDA contingent is of sufficient size. Address your inquiries in writing to Charles H. Cunningham, USDA Welfare Association, USDA, Washington 25, D. C.

Memento from Chile

IT'S ALWAYS good to have tangible evidence that the Department's foreign training program is bearing healthy fruits in other lands. Latest example is a soil conservation plan for a 1,600-acre farm in Chile, complete with land-capability map, which reached Bill Hull, Foreign Liaison Representative for Soil Conservation Service, a few days ago. Carlos Dias sent it. This young Chilean spent 1944-45 with SCS learning soil conservation, from gully plugging to the detailed business of conservation surveys and acre-by-acre conservation planning. The staff of Texas Soil Conservation Work Group No. 30, headquarters at Seguin, will remember Carlos. He was with them several months.

Carlos is now a bona fide soil conservationist in his home country. He heads the survey work of the Seccion de Conservacion de Suelo of Chile's Ministry of Agriculture. Manuel Rodriguez, who was among the first 25 Latin Americans chosen by their Governments to come to the U. S. to learn soil conservation, is chief of the conservation agency. And, Mario A. Rogers, recently returned to Chile after spending 1947 learning the agronomic end of soil conservation with our SCS, has taken up the job of finding better grasses for Chile's grazing lands.

The three of them are now training other young Chileans to do soil conservation work. With a staff of something like 20 they already have made conservation plans for all Chile's experiment stations, for a 5,000-acre coastal area to be divided into small farms, and for large sections of Bio-Bio and Malleco Provinces, Chile's best farming regions. In addition, Carlos writes, "I went overseas to make a conservation survey of Easter Island (Isla de Pascua), a South Pacific island Chile owns and which we say is our 'Colonial Empire'." Their biggest job thus far lies just ahead, for they have been "asked to put under conservation about 600,000 acres of government-owned rural properties."

The conservation plan Carlos sent is an interesting study for Department people. It has been worked out in finest detail and follows closely our own principles of soil conservation planning according to the needs and capabilities of each acre. Not only does it show the farmer how to treat all classes of land to control erosion and improve fertility, but it tells him *why*—why to contour, terrace, follow different rotations on different lands, why use grassed waterways, why brush

should not be burned but plowed under. The plan is a good piece of soil conservation educational material as well as a practical blueprint for the Chilean farmer.

The Department's SCS thus far has trained 85 Latin Americans in soil conservation—132 from all countries. More come every month or so. They stay a year or more, then leave us determined to put soil conservation on the map in their own countries. The satisfying thing about it is that they're doing it, often against grim handicaps, but they're doing it.

Journey's end

DAVE DAVIDSON, Assistant Administrator of the Production and Marketing Administration and Vice President of the Commodity Credit Corporation, died at his Washington residence, on May 28, after an extended illness. Burial was at Delano, Calif.

Coming to Washington in 1946, as head of PMA's Field Service Branch, Mr. Davidson was later appointed Assistant Administrator for Production. In this position he was responsible for nationwide production activities and programs of the agency, including agricultural conservation and adjustment programs, farm marketing quotas, farm labor supply, and others involving direct dealings with farmers through State and county farmer committees.

In addition to his service in various capacities with the Department of Agriculture, Mr. Davidson had extensive and successful experience as a farm superintendent and operator of his own 500-acre farm near Woodville, Tulare County, Calif. He always considered the farm his home. He was pleasant and cooperative in his work. His great interest was in getting the job done for American agriculture. He had no time for personal animosities or small bickerings.

Born in Pinos Altos, N. Mex., October 10, 1899, Mr. Davidson was a graduate of Occidental College, Los Angeles, earning part of his way through school by working on California farms.

At Paris

William G. Gordon and C. H. Fisher have prepared a very informative paper for presentation at the Seventh International Congress of Agricultural Industries, to be held in Paris, July 12-18. It is entitled "Industrial Utilization of Milk Byproducts." C. H. Fisher with E. M. Filachione is also author of a comprehensive processed publication entitled "Lactic Acid—Versatile Intermediate for the Chemical Industry," which we recommend. Both these publications are from the Bureau of Agricultural and Industrial Chemistry's Eastern Regional Research Laboratory.

Entomology lesson

IN ORDER TO find out whether an insecticide is safe, effective, and economical our entomologists have to do some pretty intimate work with certain insects. For instance, suppose they want to know whether a material is poisonous to a fly, and the amount required to kill it. How would you go about that? Give up?

Well, the entomologist first holds his fly captive in a small glass tube under a microscope. He uses a piston at one end of the tube to push the fly against a screen at the other end. Then he dips a tiny loop of fine wire into the insecticide solution, and a very thin film thereof forms across it. This dose can be transferred to any part of the fly at will—its nose, or at least the organ through which it inhales and which, in simple language, is the "thoracic spiracle"; into its mouth; or on its back.

The entomologist also has a highly accurate method of estimating the quantity of insecticide he has in the film on the wire loop. He can measure this to the microgram, of which there are a thousand in a gram, of which there are about 29 in an ounce. Thus he determines the relative effectiveness of fine or coarse sprays for application as dusts or aerosols, as well as what part of the insect—nerves, heart, breathing organs—makes it most vulnerable to attack. The method is rapid as well as accurate. J. Franklin Yeager and Sam C. Munson, Bureau of Entomology and Plant Quarantine, devised this delicate technique.

Peanut recipes

AIS-68 is entitled "Peanut and Peanut Butter Recipes" and provides directions for making use of these two products in some 30 different ways. Single copies are available from Office of Information, USDA. Peanut butter comes highly recommended by our food experts. Fact is, a peanut butter sandwich on whole-wheat bread with a glass of milk will impart more different varieties of valuable food elements than almost any other simple combination of easily obtainable foods you could mention.

Drink wood alcohol?

Once upon a time drinking wood alcohol was not only a sign of depravity, but an indication of a desire to leave this vale of tears. But at the recent meeting of the American Chemical Society, Dr. Robert S. Arles, of the Brooklyn Polytechnic Institute, declared that whisky of the future may be made from, as well as aged in wood and sold how a ton of sawdust, now largely wasted, could be transformed economically into 5¹/₂ gallons of potable alcohol. So, in due time, "sawdust neutral spirits" may replace "grain neutral spirits" on those bottles whose labels are so largely controlled by the Treasury Department. At the same meeting in Chicago, Dr. Edwin E. Harris of Forest Products Lab, in Madison, Wis., told how oak wood waste could be induced to yield 45 percent of sugar, when treated with a little sulfuric acid under steam pressure!

Arbor Day, wholesale

DESTRUCTIVE CUTTING or repeated fires, or both, have left some 75 million acres of U. S. forest land denuded or poorly stocked with trees. This virtually nonproductive wasteland now comprises nearly one-sixth of all our commercial forest land. We are carrying these idle acres—twice the area of Georgia—largely as dead weight. They produce almost no income. They pay little in taxes. On some of the land, timber may eventually come back by natural means. But for much of it, tree planting will be necessary if good timber growth is to be reestablished in any reasonable time.

Within the National Forests, during the past 20 years, the Forest Service has planted more than 1½ million acres. More than 2 million acres remain on which planting is needed to bring the land back into productivity; and another million acres are so understocked that fill-in planting is desirable. Under authorization of the Clarke-McNary Act of 1924, FS is also cooperating with 41 States in a program to encourage and facilitate tree planting on farm lands. Tree seedlings are raised in State-operated nurseries and sold to farmers at cost, or less. Prices for various kinds range from \$1 to \$10 or more per thousand trees. On the average a thousand trees will reforest about 1 acre. Farmers' demand for trees far exceeds available supply. This year farmers were supplied 140 million trees for woodland and shelterbelt planting. Next year the States hope to supply 300 million.

Some new tree-planting machinery has been developed. On light soils, not too steep, rocky, or stumpy for a machine to operate, 2 men can now plant 8,000 to 10,000 trees a day—as many as 10 men could plant by hand. From 1926 to 1946, planting by all agencies totaled 6,480,000 acres, of which 4,933,000 are classed as successful. That included planting by FS and other Federal agencies; States, counties, and municipalities; farmers, and other small owners; lumber, paper, water, and other companies; and schools and colleges. That is a good beginning but, at that rate, the job to be done would take generations. FS suggests a planting goal of a billion trees a year, or enough to plant 20 million acres in 20 years, as a reasonably adequate attack on the reforestation problem. Even more important is it that the kind of neglect and abuse of forests which made such a huge reforestation job necessary be discontinued. With good management, nat-

Tomatoes in Jersey and Guernsey

FORMERLY REGARDED solely as a colorful addition to a salad, tomatoes have now become a staple food in England. The increased demand for them since the war has led to overproduction, with resultant periods of saturation. Though known to us so largely as the names of famous cows, Jersey and Guernsey, together with the English Ring Fence Area, comprise the three big producing areas. Jersey's crop follows Guernsey's peak. After the liberation of these two islands all tomatoes exported to the United Kingdom were consigned to tomato-distribution associations set up by the Ministry of Food. These in turn distributed to the wholesale trade, thereby coordinating the handling of all available supplies and reducing to a minimum the oversupply in any consuming area.

But the Ministry of Food tomato-distribution control, which proved so satisfactory in Jersey and Guernsey, has been abandoned this year. Initiated as an emergency war measure to meet a scarcity, the scheme is deemed unnecessary since supply has overtaken demand. Transport difficulties, however, will compel the Channel Islands to continue the system of "bulk loading" to receiving centers, and to consign the 1948 crop to voluntary tomato-distribution organizations.

Mr. Greathouse

Charles H. Greathouse, long a USDA editor and indexer, is dead at the age of 90, after 21 years in retirement. A native of Kentucky and a graduate of University of Michigan in 1878, he had been on two Louisville papers before he entered the Department of Agriculture as an editor in 1900. After retirement he was active in the real estate business and on Arlington County, Va., newspapers, and for some time published his own weekly, *The Commonwealth*. Mr. Greathouse has been ill since last December; his wife died in 1940.

Medals awarded

The Congressional Selective Service Medal was awarded to James L. Buckley, Assistant Director of Personnel, Henry D. Abbott, Assistant to the Chief, Soil Conservation Service, and William P. Kramer, Chief, Division of Operation, Forest Service, on May 21, 1948. The medals were presented by Maj. Gen. Lewis B. Hershey, Director, Selective Service System, at a ceremony in his office. The awards were granted for services rendered in connection with the administration by this Department of the camps of conscientious objectors assigned to it by the Selective Service System during the war.

ural reproduction will keep our commercial forests producing merchantable timber crops without the necessity of tree planting.

Some ag history

EARLY AGRICULTURAL laws placed heavy emphasis on production practices. Thus King James I, in 1622, encouraged the colonists to breed silkworms and, in 1656, each Virginia landowner was required to plant 10 mulberry trees per 100 acres. John Winthrop, Governor of Connecticut and member of the Royal Society, experimented and published the results. William Penn was a leader in farm progress and his secretary, James Logan, was the Nation's first scientific agriculturist; he first recorded how maize grain results from a union of the tassel pollen and the ear silk.

The Founding Fathers and gentleman farmers led the early agricultural societies, about the earliest dirt farmer organization being the Kennebec Society, Maine, 1787. Possibly the Massachusetts Horticultural Society, organized in 1829, was the first specialty society. But in early days, the farmer who deviated from traditional practices, ignored the phases of the moon, experimented, or tried new methods was viewed askance. Rotations, the use of manure and of labor-saving devices were little known, while all farm animals tended to be undersized and poor producers.

As early as 1774, the State agricultural society of Pennsylvania suggested that "pattern farms" be set up for educational purposes, plain precursors of the demonstration farms of much later days, and other societies offered premiums to good farmers. Others still actually encouraged experimentation in specific fields. Elkanah Watson, as is widely known, fathered the agricultural fair; he also performed experiments and published and distributed the results at his own expense.

Around the late 1840's, farm conventions began in earnest for the redress of economic, social, and other wrongs. While the railroads had made agriculture remunerative quite suddenly, rising costs of transportation cut the farmers' profits. In these conventions the doctrine was preached that railroad freights must be lowered, that agriculture must be better fitted into industry, and that a national bureau to serve agriculture be established. The railroads were uncompromising and the farmers felt their charges to be exorbitant. The exactions of agents and commission merchants also won approbrium, and abuses were cited in the pricing of farm machinery. The Kewanee Convention, held 1872, called for cheaper transportation, the forma-

tion of farm co-ops, the organization of farmer clubs, a legal review of the railroad laws, and the control of the Canadian thistle by law. Improved agricultural education was demanded.

In October 1874, the Illinois Farmers' Association held a convention in Springfield attended by delegates from many other States. The convention recommended, among other things, that "in order to carry out in a practical manner the spirit and letter of cooperation they (the farmers) withhold from the market their livestock products until the price shall reach such a figure that the producer shall receive the legitimate returns for the fruit of his labor." That was a production control measure beyond all question. It ushered in modern times, so these notations will end here.

Brief but important

Atomic research

Iowa State College recently announced the dedication of a new metallurgy building for the Institute of Atomic Research, as authorized to be established there by the Atomic Energy Commission, with Dr. F. H. Spedding as Director. The new building will contain about 800,000 cubic feet of space and will cost a million dollars. W. W. Waymack, Atomic Energy Commissioner, spoke at the laying of the cornerstone, May 14.

African peanuts

The spring peanut harvest is on in Tanganyika, East Africa, the forerunner of vegetable-oil harvests which Britain expects to raise her fat ration by 35 percent, given time. For 3½ million acres of dry tsetse-infested bushland is to be cleared, plowed, and planted, and whole new villages built. The East Africans will be provided with good housing, hospitals, schools, and irrigation systems in return for—just peanuts!

Thrifty Scots

In Musselburgh, just outside Edinburgh, there is a vegetable garden of 12 acres operated the year around with steam and hot-water heating, and growing 8 crops annually. A vast labyrinth of underground pipes heats the rich, fertilized shallow boxes of soil in which lettuce, cauliflower, carrots, turnips, and other vegetables are grown for winter use in Edinburgh. Both steam and hot water are used in the pipes, though the former seems to work better. How many steam-heated gardens and farms are there in the U. S.?

Retired

Miss Helen Ferguson, Bureau of Plant Industry, Soils and Agricultural Engineering, retired April 30, after 39 years, 8 months of service. At a farewell party given in her honor at Plant Industry Station, Beltsville, Md., fellow workers paid tribute to her efficiency both in executing her direct duties as assistant head clerk of the Division of Fruit and Vegetable Crops and Diseases, and in training new personnel in fiscal and clerical work. A native Washingtonian, Miss Ferguson will continue to make her home here with her mother and her sister, Miss Marion Ferguson, PISAE.

Minnie wins out

A while back we queried the Bureau of Dairy Industry about giving cows beer to increase their milk production. The Bureau replied rather austere, with just a touch of ice in its voice. Well, Bridge Birch, the beer-drinking Friesian of W. A. Pierson, Ringwood, Hampshire, which claimed a world production record, has now been beaten out by Minnie, a herd-mate, who is an arch prohibitionist. Though quite "dry," Minnie yielded 198¼ pounds, say 20 gallons, of milk in 24 hours, as against Bridge Birch's record of 155¼ pounds for a 24-hour period—while drinking a quart of stout daily. Oh yes, Bridge Birch, is on the wagon now, too. Dry cows yield more milk in England.

Stenographic stringency

Again stenographers are scarce and something has to be done about it. But, except for recording the actions of courts and legislatures, why have stenographers? The office process of dictating to a stenographer is wasteful of time in the extreme. What is transcribed is seldom usable without editing, because so few can dictate well. Two persons are tied up all during the tedious process. Dictation to machines avoids some of these difficulties; it can be done at will, any time the person who dictates has the leisure; it can be transcribed at will by any one of a number of typists in a central pool. Fundamental to all office jobs, no matter how big, should be typing ability. The best method of all is to rough out on the typewriter what you want typed; it can be copied at will by any one of a hundred girls in a pool. Why stenography? We are now taking to cover with a large rock in our hand.

Meat servings

Department nutrition workers tell us that a pound of boneless meat—ground meat, boneless stew meat, liver, etc.—will provide 4-5 servings, but a pound of meat containing much bone and gristle—shank, brisket, plate, short ribs, spareribs, breast of veal or lamb—will provide but 1, possibly 2, or less! In-between meats are whole or end cuts of beef round, leg or shoulder of veal, ham with the bone in, and steaks, chops, roasts from loin, rump, or rib sections. A little less bone is found in center cuts of beef round or ham, lamb or veal cutlets, and chuck, which should give at least 3 servings to the pound.

H. H. Johnson

Harry H. Johnson of Houston, Tex., has been appointed Special Assistant to the Secretary, responsible directly to the Secretary for the administration of the Department's foot-and-mouth disease program carried on in cooperation with the Republic of Mexico. Mr. Johnson will also act as Consultant to the Chief of the Bureau of Animal Industry.

Fish and freight

A Production and Marketing Administration official remarks to us that "the term 'agricultural products', according to Section 207 of Public Law 733, Seventy-ninth Congress, includes fish, shellfish, and processed and manufactured products thereof. Section 203 of the same act, in effect, authorized and directed the Secretary of Agriculture to protect the transportation interests of all agriculturists in prescribed ways. The Department's obligation is—among other things—to assist in improving the distribution of fish, shellfish, and their products, including fresh, dried, frozen and canned."

Production goals

Memorandum No. 1140, Supplement 3, May 17, signed by Acting Secretary Dodd, announced the appointment of the 1949 Production Goals Coordinating Committee, of which Mr. W. A. Minor, Office of the Secretary, is chairman. For more details see the memorandum.

Farm program

The Aiken bill, S. 2318, has been reported to the Senate and you will find a digest of its provisions in the Digest of Congressional Proceedings issued May 19, for actions of May 18, and available from the Division of Legislative Reports, Office of Budget and Finance, USDA.

Praise where same is due

Director Wilson of Extension Service recently sent in a copy of a letter written to him by County Agricultural Agent Charles L. Brown, Vigo County, Ind., after a visit to Washington, D. C. The second paragraph of the letter read: "One thing which particularly impressed me in all the USDA offices I visited was the kindly way in which the office secretary or receptionist met the visitors. I always felt at home in any department I visited. Your Department is, certainly, to be commended in this respect." Stand up and take a bow in unison, girls! As long as that's the way you receive visitors, both here and in the field, so long the Department will be both respected and genuinely liked.

2,963 Solomons

Coronet magazine for June featured the county agent and cooperative extension work in an article, "Unele Sam's Farm Crusaders." The agent who is the center of the story is John S. Jones, Lincoln County, Colo. Of him the magazine says that, despite his low salary, he "must have the wisdom of Solomon on weather, crops, baseball, bugs, international affairs, prairie dogs, furniture arrangement, beef cattle, alfalfa weevils, and stud poker."

Library, note

Writing on scientific publications, in Science for May 14, Frans Verdoorn, managing editor of *Chronica Botanica*, speaks of the "able and active librarians" of USDA, and continues: "Their new Bibliography of Agriculture, a monthly list of agricultural and biological publications, is so complete, reliable and up to date that for many purposes it will be more useful than any abstracting journal."

Talk to the guy!

Personnel Administration, April 15, issued by Office of Personnel, USDA, contains an especially helpful article by Verna C. Mo-hagen, chief of Soil Conservation Service's Personnel Management Division. It argues that there just is no substitute for talking with a guy. By example and precept it shows that, if supervisors honestly, patiently, and fully explain circumstances and conditions to those who work under them, such friendly talking it over eliminates any number of personnel problems. We tried to condense the article here, but it is too good to boil down; we recommend that you get hold of the original and read it yourself.

Quinine

Research Achievement Sheet No. 91 (O), available from Agricultural Research Administration, USDA, deals with the quick, simple method for determining the quinine and total alkaloid content of cinchona bark devised by chemists at the Federal Experiment Station in Puerto Rico. At the station alone about \$10,000 is saved annually—or can be devoted to other investigations—by the use of this method.

Music and malnutrition

A recent press story told of the conflict between the spirit and body in the realm of music. Dr. Hans Kindler, director of the National Symphony Orchestra, Washington, D. C., told of conducting the great Hamburg orchestra and experiencing disappointment when he turned to the brasses, for those former stalwarts, who used to be able to make the brass valves of a tuba swell with pressure, just did not have the calories in their diet to give dramatic strength to a crescendo. When a woman in the audience began to scream with hysteria, the concert master pressed his arm and said, "Pay no attention. That is nothing. It happens often." The cause? Malnutrition. And when a man in the bank of strings fainted during the performance, his neighbors covered him up and the music went on without a break. That happened often, too, Dr. Kindler was told.

Farm youth abroad

Press release No. 1052, available from Press Service, USDA, tells about the selection of 17 rural young people, representing as many States, to participate in the International Farm Youth Exchange Project. They sailed from New York June 17. Four of them will remain in Great Britain and the others will continue on to Denmark, Norway, Sweden, France, Italy, or the Netherlands. They were selected on nominations made by State Extension officials and will study European farm life while personally taking a very active hand in it.

Wilson to Greece

M. L. Wilson, Director of Extension Work, flew to Greece recently to handle an assignment as technical consultant and adviser to the American Mission for Aid to Greece and the Greek Government, working through the Department of State. His services were specifically requested and will be rendered during two to three months. A native of Iowa, Mr. Wilson was for many years successively county agent, professor of agricultural economics, and on the Montana State extension staff. In Washington he has been head of AAA's Grain Section and of the Homestead Division, Department of the Interior; and both Assistant and Under Secretary of Agriculture. He is a pioneer in the early establishment of mechanized farming; he headed the national nutrition program during the defense period, and is known internationally as a leader in adult education.

The Awards

N. R. Bear, Office of Personnel, offers a complete and readable exposition of the USDA Honor Awards Program, its history and development, the types and nature of the awards, the eligibility standards, and the machinery for considering nominations. See Personnel Administration for April 15, issued by USDA's Office of Personnel.

Alcohol tractor

A revolutionary type of engine that can burn ethyl alcohol as a motor fuel instead of gasoline, has been designed by Prof. A. J. Meyer, and developed at the University of Kentucky. It is equipped with a special carburetor with two chambers, one superimposed on the other, so that the engine can draw on either gasoline or alcohol, power being derived from both.

Complexion secret

Now experts at Harvard and at Massachusetts Institute of Technology reveal that the skin of women is paler than that of men because it shows less blood and less of a brown pigment called melanin. On the other hand, it has more carotene, the chemical that imparts color to carrots and which is derived from various vegetables and from egg yolk. Looks like that school-girl complexion is more of an agricultural product than we had hitherto imagined.

What USDA does

The Appropriations Committee of the Senate, in its report on the Agricultural Appropriation Bill, 1949, said: "Appropriations to the Department of Agriculture are for the benefit of all of the people of the Nation. These appropriations support agricultural research and education, and maintain many vital services to producers, processors, and distributors of agricultural products. These activities increase the production of essential foods, fibers, forest products, and other important agricultural products, and facilitate their processing and distribution to all the people."

That big smile

Mrs. Carrie Hall, colored elevator operator in USDA for almost 33 years, received a special presentation from Secretary Anderson upon his retirement from the post. After he had shaken hands and said goodbye to most of the Department's Washington employees, Secretary Anderson presented Mrs. Hall a photograph of himself on which he had written a message. It read: "When someone has smiled at me every morning for a long time, and has been pleasant all day, I appreciate it—and so, a picture to Mrs. Carrie Hall—Clinton P. Anderson."

Philadelphia

Opportunity was recently afforded the editor of *USDA* (by the Eastern Regional Research Laboratory, AIC) to address the PHILUSDA Club in Philadelphia in three fair-sized fragments. We talked on the importance of accurate information to a group of about 60 at the downtown headquarters of Forest Service's Eastern Region; then to perhaps 150 at the headquarters of the Northeastern Forest Experiment Station, composed of FS and nearby SCS employees, at Upper Darby; and finally to some 175 staff members of the Eastern Lab. We were particularly happy to meet, or to renew acquaintance with, Miss Sarah W. Parker of the Library, Director V. L. Harper of the Northeastern Forest Experiment Station, Director Percy A. Wells of Eastern Lab, Assistant Regional Conservator Alvin C. Watson, Frank A. Connolly and J. K. Vessey of the FS Eastern Region, and Harold Jenkins of SCS.

The elm goes dry

According to Dr. Curtis May, USDA's shade-tree specialist, as much as 50 barrels of water may evaporate from the leaves of a large elm in the course of a single hot summer day. Desiccation under the elms!

Soft fall the apples

While USDA scientists have developed spray materials which prevent premature apple drop, a farmer near Kennett Square, Pa., is reported to be using a rubber mat to cushion the fall of his apples. The apples are said to sustain no bruises when they land on this soft sponge-rubber 8 by 8 mat. The mat is reported to have increased the yield of first-grade apples greatly by catching thousands of those knocked down by careless pickers.

Powerful insecticides

To recommend powerful chemicals as insecticides after insufficient testing is to court hysteria and disaster. Many new insecticides have been overpublicized to the point of hysteria. First of all, good insecticides must be safe as well as effective, and much of their effectiveness depends upon their formulation and the carriers used. Unwise competition and the effort to supply the same thing for a penny less can also lead unscrupulous sellers to market ineffective products.

Versatile bees

Honey has become a secondary objective of beekeeping, for bees are now needed primarily for pollinating crops of great economic value. The increasing use of highly effective insecticides menaces the bees and there are already some serious shortages. A good acre of red clover can produce up to 25 bushels of seed, if the pollinators get in their work on the blossoms, yet the average yield is but a bushel per acre! With the growing need for grass and legume seed, bees are no longer agriculture's step-children.

Crowding on the farm

You think of rural living as associated with wide open spaces, but it looks as if there is a night and day shift on the beds in some farm homes. According to a Census Bureau survey, whereas only about 1 city dwelling in 20 is overcrowded, 1 in 10 country dwelling units is in that condition. In this sense any residence where there are more than 1½ persons per room—say 4 persons in 2 rooms, or 7 in 4—is regarded as overcrowded. It looks as if you'd better stay in the city if you want wide-open space indoors. Of course you are better off outside in country than city, unless it rains hard!

Small rural industry

Under the title: "The Small Rural Industry—A Study of the Possibility of Making Insulating Board from Straw," Circular 762, has appeared, by E. C. Lathrop, T. R. Haffziger, and R. V. Williamson of the Northern Regional Research Laboratory, Peoria, Ill., operated by the Bureau of Agricultural and Industrial Chemistry. It details a process for manufacturing from wheat straw 4,500 square feet per 24-hour day of 25/32-inch insulating sheathing board, 4 by 4 in size. But it also discusses manufacturing costs, merchandizing, estimated profits, and conditions required for successful plant operation. In other words, the process is properly presented in the matrix of its economic possibilities, with some consideration of general problems faced by small rural plants making nonfeed or nonfood products from agricultural materials in competition with large-scale, highly merchandized industries operating on national scale.

Airplanes in the woods

Forest Service has recently issued an enlightening processed publication called "Use of Aircraft in Forestry." Procure it from FS's Division of Education and Information.

Appreciation

You will be interested in the following quotation which was taken from a letter that Miss Abbie K. Kurtz of our Chicago Bureau of Animal Industry office wrote Secretary Anderson: "I am an employee of the Meat Inspection Division under your jurisdiction. I desire to thank you personally for the Citation I received from you for my thirty years' service. This is the first time I have ever received any official recognition of my work and of course, it pleased me very much."

Lives of the Secretaries

Because of the resignation of one Secretary and the appointment of another, USDA Document No. 3 has been revised as of June 2, 1948 and is ready for distribution. It is entitled, "Biographies of Persons in Charge of Federal Agricultural Work, 1836 to Date," and contains brief biographies of the Commissioners of Patents, Superintendents of Agriculture, Commissioners of Agriculture, and Secretaries of Agriculture. To get copies write T. Swann Harding, Office of Information, USDA, Washington 25, D. C., or phone Miss Arden, Ext. 4649.

Shade trees

Shade trees represent an economic investment of 600 million dollars for the U. S., and that isn't hay. They also have a much greater sentimental value. Some 40 common shade trees are afflicted with about 150 diseases, from time to time, and a tree can't tell the doctor where it hurts worst or describe its symptoms. Now Rush P. Marshall and Alma M. Waterman have written Farmers' Bulletin 1987, on "Common Diseases of Important Shade Trees." It makes recommendations for control by spraying, dusting, sanitation, pruning, wound treatment, fertilization, and the use of resistant or immune trees. Write Office of Information, USDA, Washington 25, D. C., if you want a copy.

Reviving bacteria

Workers in the bacteriological laboratories of the University of Illinois report that bacteria apparently killed by streptomycin can be restored to life and normal activity after 3 days, when a mysterious inhibiting factor is added which they now seek to identify. Possibly this is at the bottom of the so-called tolerance certain micro-organisms are said to develop for certain antibiotics. It looks as if the inhibiting factor is a protein.

Seed distribution

In our issue for April 12 we had something to say about USDA's seed distribution. Office of the Solicitor now provides more definite information. The organic act founding the Department (May 15, 1862, 12 Stat. 387) directed the Secretary to collect, procure, test, propagate, and distribute new and valuable seeds and plants. The first provision for Congressional seed distribution appeared in the Appropriations Act of June 16, 1880 (21 Stat. 294), making appropriations for the year 1881. Thereafter appropriations for the purchase and distribution of valuable seeds, bulbs, and so on, with allotment to Members of Congress for their distribution among constituents, appeared annually in USDA appropriation acts up to and including fiscal year 1923 (May 11, 1922, 42 Stat., 516). Congressional distribution of seeds was discontinued in the Appropriation Act for fiscal year 1924 (42 Stat. 1289).

Farm Policy Forum

The first two numbers of this Quarterly published from Iowa State College Press indicate that it is truly a forum and merits careful reading by all interested in the controversial aspects of farm policy.

Cotton

If interested in cotton you may likewise be interested in certain observations on conditions in Egypt, India, Pakistan, and Europe, by E. D. White, Assistant to the Secretary, and head of the United States Delegation to the Seventh Annual Meeting of the International Cotton Committee, held at Cairo the first 10 days of last April. You can procure this material by writing Press Service, USDA, and requesting No. 1067.

New lab

An appropriation of a million dollars has been made from Research and Marketing Act funds for the construction and equipment of a laboratory at Pasadena, near the California Institute of Technology. It will provide quarters for the Laboratory of Fruit and Vegetable Chemistry, Bureau of Agricultural and Industrial Chemistry, which, since 1914, has been housed in rented quarters in Los Angeles. It is anticipated that AIC's new Research Laboratory will be ready for occupancy in about a year.

Names again

We mentioned surnames of USDA employees in the April 12 issue of the house organ. We now suggest that those interested in philology get hold of the communication from Perez Simmons, Bureau of Entomology and Plant Quarantine (712 Elizabeth St., Fresno 3, Calif.), in the March 15, 1948, Journal of the Washington Academy of Sciences, entitled "English-language surnames of biological origin." If you want to find some really unique surnames with agricultural connotations, here they are.

War transfer rights

Executive Order 9952, April 22, terminates the reemployment rights of War Service transferees, except where applications for such rights are made on or before October 22, 1948. All with reemployment rights who intend to exercise such rights must do so on or before that date. This Executive Order does not affect the reemployment rights of employees who have been transferred to positions in public international organizations, in the American Missions for Aid to Greece and Turkey, or under Executive Order 9932, as Foreign Service Staff Officers.

Drinking apples

We once knew an elderly and somewhat inebriate farmer who raised what he called "drinking potatoes" from which he prepared a potent and authoritative distilled spirit. There are also "drinking apples." F. C. Bradford, Superintendent of our Plant Introduction Garden at Glendale, Md., is authority for that. Such elder apples have been cultivated in France and England since the 16th century, and seedling stocks were brought here by the Pilgrim Fathers, though the variety has not been an important one here for a century. Apples grown especially for juice should be high in acidity and astringency—as astringent as a grim Pilgrim Father, no doubt. They should be cheap to produce—early, frequent, heavy bearers, resistant to cold, and small in size to harvest by shaking. Mr. Bradford suggests re-examination of European elder varieties for breeding characters worth perpetuation and development here. Let there be more drinking apples; amen.

Dairy statesmanship

Nathan Koenig, Executive Assistant to the Secretary, spoke May 25 at the celebration of the tenth anniversary of the Federal-State Milk Marketing Order, in Syracuse, N. Y., on the subject of Dairy Industry Statesmanship. To procure a copy of this talk write Press Service and ask for No. 1087.

Meat inspection

The bill authorizing payment of Bureau of Animal Industry's meat inspectors by the USDA, instead of from fees collected from the packers, passed both Houses of Congress and was signed by the President June 5.

Wheat varieties

USDA surveys show that 216 varieties of wheat are grown in the United States. One hundred and ten of these resulted from breeding and selection by State and or Federal experiment stations, and, in one recent year, were grown on 33 million acres, more than half of the entire area planted to wheat. Sixty-three other varieties now in use here were brought from other countries and grow on about 28 percent of the acreage, and 44 varieties were developed by private breeders and now grow on about 22 percent of the acreage.

Florence M. Hamilton

Mrs. Hamilton, agricultural economic statistician in Bureau of Agricultural Economics, died suddenly May 13. A native of Cleveland, she graduated at Oberlin, and entered BAE in 1924; she later took her master's degree at George Washington, majoring in economics. She was an expert on wool and prepared the Wool Situation during the war and postwar years. Her "C. C. C. Wool Purchase Program, 1943-47," published in the December 1947 issue, was reprinted in Wool Digest, London. Her work was the more remarkable in that she had been handicapped by total deafness for over a decade.

Bigger and better eggs

There isn't much we can do about it, according to British investigators; the bigger eggs already taste better. Under the direction of Dr. Hugh B. Cott of Cambridge University, three experienced tasters tested the eggs of 81 species, scrambled and steam-cooked, without knowing which was which, but using prime hen fruit as a standard. For your information, gull's eggs do not taste as good as hen's eggs, but are somewhat better than guinea hen and far better than barnyard turkey eggs. Small eggs of small birds proved unpalatable; the most repulsive eggs were supplied by the wren. The kind of foods the birds ate did not affect the taste of their eggs, and this was true even of gulls, fed on fish, while scavenger carrion-crow eggs tasted better than those of pheasants and ducks. Since eggs of small birds taste bitter, maybe that is nature's way of foiling nest robbers. However, in general, the bigger the egg the better the taste.

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USDA

FOR JULY 5, 1948

Graduate School

THE DEPARTMENT of Agriculture Graduate School is cooperating with the Pan American Union in a new way, at the request of Dr. Alberto Lleras, Secretary General of the Organization of American States. The idea is to provide broader educational opportunities for both the staff of the Pan American Union and members of Latin American embassies resident in Washington. Basically this will promote a better understanding of the Latin American Republics and the United States.

The program has been developed by Dr. Jorge Basadre, Director of the Department of Cultural Affairs, and the Graduate School Department of Languages and Literature, which latter is under the chairmanship of Lester A. Schlup. The school will offer the following courses during 1948-49; Inter-American Problems; English for Foreign Students; Correction of Speech Dialect; Elementary French, Portuguese, and Spanish; and Shorthand in Spanish.

These courses will be offered after working hours at the Pan American Union. Except for a nominal registration fee, payable by each student, the co-operative project will be financed by the Union. To ensure effective instruction the maximum enrollment in classes will be limited to 15 persons. For more detail inquire at the Graduate School.

SPECIAL!

The talk made at the Honor Awards Ceremony in Washington, D. C., May 17, by Representative Dirksen of Illinois, was so inspiring that we feel it should not be limited to those hardy souls who heard it out in Sylvan Theater in the midst of a downpour. We have had it mimeographed and a copy is reserved for you if you *write in* to the Editor of *USDA*—see back-page masthead for the address, or phone Miss Arden, Ext. 4649.

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John I. Thompson

THE APPOINTMENT of Mr. Thompson as Assistant Administrator for Marketing of PMA was announced June 3, by PMA Administrator Trigg. Mr. Thompson is an engineer and business executive of wide previous experience. A native of Bellefonte, Pa., born 1907, he grew up on a Pennsylvania farm and studied civil engineering at Penn State. He was engaged for several years in engineering and research for industrial firms handling drugs, biologicals, and food products. During World War II he was consultant to the Navy's Bureau of Ordnance.

In December 1943, Mr. Thompson founded his own engineering and research firm with headquarters in Washington, D. C. The work has been concerned with developing economic possibilities for canneries, milling companies, and other food handlers and processors, and has included research projects in transportation, warehousing, adaptations to local crops, and the development of new products. Mr. Thompson dropped active direction of his company upon assuming his new duties on the day of the announcement.

All yours—for 50 cents!

At long last the Directory of Organization and Field Activities of the Department of Agriculture, 1947, is again available as Miscellaneous Publication No. 640. Distribution has been made to the agencies but some of them will be unable to supply individuals. In that case you will have to procure it by sending 50 cents (not in stamps) to the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.

Ultimate spud

The last word in new potato varieties—Katahdin, Menominee, Houma, Sebago, or Kennebec, is not the ultimate spud by any means, for there can never be a final perfect potato. New varieties must always be bred for specific purposes. But growers can be supplied practically any kind of potato they want, given a little time and a lot of scientific know-how.

Word wisdom

WRITES A VIVACIOUS field employee: "I'm ready to go either way on this writing verdict. If the guy can bait his hooks with gobs of personality, he can write his own ticket, for I'm not going anywhere. But if he takes 'pen in hand to let you know that we are all well and hope you are the same,' I'm ready to vote eight to seven for bigger and better hunks of brevity. This brevity thing may be the soul of wit, as a wit with a soul once said. To be witty, however, wit must have body as well as soul. With most of us, it makes a difference whether we are reading writing or writing reading. 'The most impeccable authors,' observes Hazlitt, 'are those that never wrote.'

"Brevity is a form of art, and it is not for all. Only an occasional word-juggler is capable of producing an 'Off-again-on-again-gone-again-Finnegan' classic in the brief course of a single lifetime. The clipped phrase is hot stuff when it clicks, but too much mowing kills the stand. An amateur can prune a tree to death. Although the short short satisfies when the sap is running in that direction, it's a good idea to keep Les Miserables around, just in case. Aesop was a great guy. But Anthony Adverse and Gone With the Wind bring in the yeasty dough. And the longest way round with Alexander the Great Woollcott is still the sweetest way home to solid joy for millions.

"Not unlike the ungainly polliwog, the polysyllable is most conspicuous in the shallow cove, but it also frequents all the streams and harbors of thought. It is neat or not, depending. 'Tintinnabulation,' sizzling from the anvil of Poe's genius, becomes a thing of beauty and a joy forever, while Homer himself could not have given life to a dead word like 'conservation.' It is bad that such a sterile swivel-chair word should have been selected to front for the most urgent chore of mankind. Spade up a dynamic cue that will click in Main Street and at the forks of the road some day while you are resting, and the po' little chillens of some future generation will rise up and call you blessed."

Statisticians, Hail!

Described by its publisher as a veritable mine of valuable information, the Monthly Bulletin of Statistics of the United Nations is now available at an annual subscription price of \$5. Write the Sales Section, United Nations, Lake Success, N. Y. The bulletin summarizes 1,600 different series received at the statistical office of UN.

Information statement

THE FOLLOWING statement on information work made by former Secretary Anderson before the Subcommittee of the House Appropriations Committee, considering the USDA Appropriation Bill for 1949, may have been missed by many of you, but is important enough to bring to your attention here.

Now in closing my comments on developments in our programs and projects, I want to discuss one part of our work that relates to the effectiveness of all the rest. When Congress established the Department of Agriculture, it said the purpose was to "acquire and diffuse among the people of the United States useful information on subjects connected with agriculture, in the most general and comprehensive sense of that word." It was plain then, and it is plain today, that to acquire useful information is not enough. The public doesn't get its money's worth until the information is "diffused"—made readily available to the people.

Through the years, Congress has given the Department additional kinds of work to do—service and regulatory work and administration of programs in which individual citizens can cooperate in their own and the public interest. Again, it is plain that service, regulatory, and action programs can serve their intended purposes only if the people know about them and understand them. Many years ago Congress recognized that some information was useful only when studied or demonstrated in a practical way, only when the people have certain basic knowledge of natural science and economics. And so a great educational system was created—cooperative extension work in agriculture and home economics.

In accordance with the original and continuing purpose of diffusing information, and in accordance with the purposes of later legislation, Congress has regularly appropriated money for the preparation and distribution of bulletins and reports, yearbooks, motion pictures, exhibits, aids to the press, and information for radio listeners. Now, the coming of television offers a new opportunity to serve the public. It will also put a new load on our staff and funds.

One indication that people want information from the Department is the fact that we get about 3,000 requests a day, on the average, for our bulletins. And, of course, many additional requests are filled by State extension services which distribute Department bulletins along with those prepared in the land-grant colleges. I have no tally on the number of letters we get which request information other than that presented in bulletins. It would be a tremendous total.

By official regulation and by actual practice, the information we issue is limited to that required by the organic act and the subsequent legislation we have been directed to administer. Yet we are harassed at times by ill-founded charges of "propaganda." Careless criticism hurts Government work in this field as in many others. Furthermore, no matter how unfair and unjustified the charges may be, they often have the intended effect—budgetary limitations that are inconsistent with the importance of the work.

We are not asking for increased appropriations for information work except to take care of increased costs of printing and binding. I mention the problem because I know you want to understand the difficulties with which we are confronted in carrying out the directions of Congress. As your chairman has suggested, you people whose duty it is to study the Department are in a

First Yearbook

THE FIRST YEARBOOK of the United States Department of Agriculture was dated 1894, but appeared in 1895, in compliance with an act of Congress approved January 12, 1895, and in accordance with the instructions of Secretary of Agriculture J. Sterling Morton based thereon. At this time Charles W. Dabney, Jr., was Assistant Secretary of Agriculture, and in charge of research and scientific work.

Before this time the annual report of the Secretary of Agriculture had contained a great deal of general informational material. The idea now was to separate the scientific reports and other useful information designed for the instruction of ordinary citizens from the purely executive and business matter in the annual report. Assistant Secretary Dabney admitted that the new book imperfectly represented the ideal in mind, because the new law was passed so late that some papers used for the Yearbook had been prepared for the annual report.

The Yearbook of 1894 did contain the Secretary's annual report, however, as well as a series of papers by the chiefs of the Department's various bureaus, divisions, offices, and sections, two or three papers by State officials, and an appendix of reference information. The Department printed half a million copies of the book for \$300,000, less distribution costs. The agencies then comprising the USDA and their heads were as follows:

Weather Bureau, Mark W. Harrington; Bureau of Animal Industry, Dr. D. E. Salmon; Division of Statistics, Henry A. Robinson; Office of Experiment Stations, A. C. True; Division of Chemistry, Dr. Harvey W. Wiley; Division of Entomology, Dr. L. O. Howard; Division of Ornithology and Mammalogy, C. Hart Merriam; Division of Forestry, B. E. Fernow; Division of Botany, Frederick V. Coville; Division of Vegetable Physiology and Pathology, B. T. Galloway; Division of Agrostology, F. Lamson-Scribner; Division of Pomology, Samuel B. Heiges; Division of Agricultural Soils, Milton Whitney; Office of Fiber Investigations, Charles Richards Dodge; Office of Irrigation Inquiry, Charles W. Irish; Office of Road Inquiry, Gen. Roy Stone; Gardens and Grounds, William Saunders; Division of Publications, George William Hill; Division of Accounts and Disbursing Office, Frank L. Evans; Seed Division, M. E. Fagan; Document and Folding Room, Will H. Bane; Museum, James M. Watt; Engineer, John A. Harvey; Chief Clerk, D. MacCuaig; Librarian, W. P. Cutter.

Mistakes

It has been said truly you must learn from the mistakes of others. You will not live long enough to make all of them yourself.

good position to combat misinformation and misunderstanding if we will but tell you our problems and give you the facts to the best of our ability.

REA's kilowatts soar

OPERATORS OF RURAL power systems financed by the Rural Electrification Administration purchased at wholesale the unprecedented total of 3,082,267,051 kilowatt-hours of electric energy during the fiscal year ended June 30, 1947, at a record-breaking cost of \$26,909,545, or an average of 8.7 mills per kilowatt-hour. This compares with an average cost of 8.8 mills paid by the REA borrowers for wholesale purchases during the 1945-46 fiscal year.

Electric energy purchased by REA-financed systems during the 1946-47 fiscal year exceeds by 714,486,303 kilowatt-hours the previous high of 2,367,780,748 kilowatt-hours purchased during the preceding fiscal year. In 1939, when REA first compiled energy statistics, the wholesale purchases amounted to only 152,397,929 kilowatt-hours.

The Department announced that during 1946-47 the REA borrowers purchased at wholesale 60.4 percent of the total, from commercial suppliers at an average price of 10 mills per kilowatt-hour.

During the same period they purchased at wholesale 39.6 percent of the total, from publicly-owned or non-profit suppliers at an average rate of 6.8 mills per kilowatt-hour.

As of June 1, 1948, the REA-financed electric power systems numbered 1,037, of which 917 were in operation. Their operating facilities included approximately 645,000 miles of lines serving 2,190,000 consumers.

REA has approved loans totaling about \$1,300,000,000 for these facilities. These loans, to be repaid over a maximum period of 35 years, bear 2 percent interest.

Brief but important

ABOUT USDA

When *USDA* is in italics it means this Department of Agriculture employee house organ. If you are getting too few or too many copies, phone or write Mrs. Monica T. Crocker, Office of Personnel, Department of Agriculture, Washington 25, D. C., who has handled its distribution for some years. If you want single copies of back issues to complete a file, or extra copies of current issues, write either Mrs. Crocker or the editor of *USDA*—and the latter is decidedly *not* the editor of the Department of Agriculture. Hereafter the back masthead on page 4 (or 8) will carry the name and full address of the editor. When you are told to write the editor of *USDA* to get this or that material, look back there for the address. Thank you.

Dr. Jeter

The board of trustees of Clemson College has voted to confer upon Frank Jeter, extension editor since time immemorial, the degree of doctor of science. As far as we are aware, this is the first time an extension editor has been so honored, and we certainly cannot think of any information specialist who ever came near it, until after he left information work! Fortunately, if anyone in this field of endeavor was to have been so honored, Frank Jeter is the man to have been selected. It is absurd to say that his friends rejoice, for that means everybody; he has no enemies.

Open house

A statistics exhibit and open house at the Statistical Laboratory formed part of Iowa State's annual Veishea (formed from the first letters of the college's various divisions) celebration in May. About 1,500 visitors were counted. Machine equipment was demonstrated by processing completed questionnaires of an opinion poll; cards were punched, sorted, and tabulated; late-model calculating machines went through their paces. A happy time was had by all.

John N. Norton

Mr. Norton, former member of the House of Representatives from Nebraska, has retired from Federal Crop Insurance Corporation, its first employee to reach the mandatory retirement age of 70. In 1913, he sponsored the first bill proposing a unicameral legislature in Nebraska. He has been special adviser to FCIC since its program began, in 1938, coming to it after 3½ years in AAA. He has been a member of the House Committee on Agriculture, and a dirt farmer and leader in farm organization work for many years following his graduation from Nebraska University in 1903. He sponsored Nebraska's Constitutional Convention of 1919-20, and served as a member thereof. He left office with a new watch and chain, provided by his fellow employees, and an engraved certificate signed by Secretary Brannan making him an FCIC collaborator.

Elm diseases

Our entomologists have identified an important insect that transfers the virus disease, phloem necrosis, from diseased to healthy elms; it is a species of leafhopper. The disease is one of the two major menaces to elms. If interested in this subject, you should write Press Service, USDA, and ask for No. 1198, which goes into detail.

New REA division

A Power Division has been established in Rural Electrification Administration to give borrowers more effective service in connection with their power-supply problems. It will be headed by J. B. McCurley, present Chief of REA's Technical Standards Division. Its establishment became essential because of complex power problems facing borrowers—procurement, wholesale rate contracts, adequacy and dependability of wholesale service, design and construction of necessary new facilities, and so on. No fundamental change in agency policy is contemplated.

Miracle farm

Maryland Miracle Farm is Robert Froman's article on the Agricultural Research Center, Beltsville, Md., in June-July Pageant, and he did a mighty fine job, mighty fine. But while you have the magazine handy don't miss Gelet Burgess' article completely composed of monosyllables and stimulatingly entitled: "What's Wrong with Four-Letter Words?" It is a tour de force if nothing else.

USDA: July 5, 1948

Al Bond writes

An enthusiastic letter recently blew in from Al Bond—formerly Radio Service—now Station KIRO in Seattle. He likes USDA, but says it makes him go to the library too often and read too much. He claims a lot of meat is crammed into the casings, though. He hopes to see many bureaucrat friends when the ACE meets out that way this summer.

All babies

Our nutrition specialists say that all babies are born calcium-poor because their bones have to be soft and flexible to survive birth. Once safely born, however, calcium should be poked into them, preferably not in the form of limestone slabs. Milk is rich in calcium to supply their needs. Milk is important in the diet of adults as well as in that of the growing young, but part of it can then be cooked into the food.

Nutrition News Letter

How many of you see or know about the Nutrition News Letter, published monthly by Production and Marketing Administration? The June issue is No. 71. If it sounds like something you should see, and you have been missing it, better write PMA Information Branch for a sample copy.

Remember the reader

"The reader still makes up his mind what he is going to read. *He doesn't read things because they are easy; he reads them because they are interesting.* If they are hard to read, they're not interesting. If they're easy to read, they may not be interesting too." This is from an article by Sherman L. Smith in Printers' Ink for April 30. People will wade through all sorts of technical phraseology, forbidding polysyllables, and poor syntax, if they find what is written interesting to read. Consider Henry James and Theodore Dreiser, both of whom wrote tortuously involved prose, but both of whom were found interesting by an enormous number of readers. Rule No. 1 is *Make it interesting.* They'll read it.

Virus sans host

Dr. A. P. Krueger, chairman of the department of biology at University of California, has recently reported on the first successful production of a virus in the absence of any bacterial host cells. He and his assistants have been working on this problem for years, using the common staphylococcus responsible for Job's affliction, boils, and a virus that causes bacteria to disappear. In the course of these experiments a substance was found which caused the virus to form more virus. This precursor has now been separated from the bacteria. When the virus was added to this filtrate from the bacteria, it reproduced itself. This is the first time a virus has been reproduced apart from the cells on which it normally propagates itself.

Orient-bound

Dr. Allan K. Smith, Oil and Protein Division, Northern Regional Research Laboratory, at Peoria, has left for 3 months in Japan, Korea, and China. While there he will investigate the desirability of soybean varieties for various food uses, seek new products thereof in Oriental kitchens, and collect cultures of bacteria, molds, and yeasts the natives use in developing their soybean foods. He will also study their methods of modifying and improving the flavor of soybean foods, making them more palatable to Americans. Information obtained will accelerate research in extending and expanding the use of high-protein soybean food products. Research and Marketing Act funds have made the tour possible.

Prepackaged produce

You will find in April-May, Marketing and Transportation Situation, Bureau of Agricultural Economics, a report of a study made by Donald R. Stokes, formerly with BAE and now with the Marketing Research Branch of Production and Marketing Administration. It is entitled, "Retailing Prepackaged Fresh Produce by Self-Service Food Stores." If your interest lies at all in this direction you will find much valuable information here.

Western Lab Program

We have copies of a mimeographed presentation by Director M. J. Copley of the Western Regional Research Laboratory, Bureau of Agricultural and Industrial Chemistry, Albany, Calif., covering the research program of this institution. If interested in pectin, frozen-food processing, the deterioration of dehydrated foods, dehydrated eggs, and processing waste for utilization, you might want a copy. Then *write, please do not phone.* Editor of USDA; see bottom 4th column, page 4.

Coffee time

We have previously mentioned herein a study purporting to show that a break for coffee stimulated worker production. There are other studies which show the contrary, remember. One made recently indicated that the coffee break not only did not enhance worker efficiency but diminished it. Such breaks can be a simple waste of time, especially when abused.

Fooling the busy bee

Dr. Colin Butler of England has found that if he puts into the hives syrup in which red clover flowers have previously been soaked, the bees who drink it are fooled into believing that red clover yields a good beverage, and they become less likely to avoid it.

Hens in batteries

The British are producing eggs on a robot basis, with hens in batteries installed in well-lit, well-ventilated sheds, built in three metal tiers of cages, one hen per cage. The eggs drop through a wire mesh on to a conveyor belt! The robots begin to lay when 4-5 months old and continue until their productivity ends 2 years later—and if they don't keep a good average, off goes their heads! So a battery of a thousand hens needs 1,500 recruits annually—there are no volunteers. The robots never know the joy of roosting or scratching for worms, but are they really miserable? Well, they produce 200 eggs apiece a year, as compared with only 120 for their free-ranging sisters!

New and fascinating

We mean Farmers' Bulletin No. 1988 on Mint Farming, dear to the heart of all julep lovers—actually mint has really important uses, too—mint oil, remember?—and Circular No. 29, Bamboo, Culture and Utilization in Puerto Rico.

Dawn tree

That giant Metasequoia tree, closely related to the California Sequoias, found in China's most inaccessible interior by Prof. Ralph W. Chaney, University of California, also flourished in the days of the dinosaurs. The biggest one Prof. Chaney saw was 98 feet tall and 6 feet in diameter at 11 feet above the ground, where its flaring buttresses end. Unlike the evergreen American Sequoias, Metasequoia loses its foliage in the autumn. Professor Chaney has planted seed in his greenhouses, but will not pace the floor smoking cigarettes until a 98-foot tree appears.

Couch honored

Dr. James F. Couch, leader in rutin research at our Eastern Regional Research Laboratory, was awarded a well-merited honorary degree June 16 by the Philadelphia College of Pharmacy and Science, in recognition of his "lifelong service to science and for the good of mankind." Dr. Couch joined the Department in 1917 and served with the Bureau of Animal Industry for 23 years, becoming an authority on the chemistry of plants which are poisonous to livestock. In 1940, he was assigned to the Bureau of Agricultural and Industrial Chemistry's Eastern Laboratory at Wyndmoor, Pa., where he heads up the research on tobacco utilization.

Impure penicillin

An editorial in the British Medical Journal of April 24, bears the striking title, "The Advantages of Impure Penicillin," and starts off by noting that the imperfectly purified penicillin of earlier days was more effective than the refined product of today. This greater activity is attributed to unknown substances other than penicillin and its derivatives. It is suggested that until these can be identified it might be better "to revert to older methods of manufacture, and so return to the cruder product which we have so unjustifiably despised in recent times. Highly refined penicillin is essential for intrathecal and intraocular use, but for intramuscular injection crude material has only minor disadvantages." Maybe some readers of *USDA* would like to get the journal from the Library and read the full editorial.

FCA, 15

Farm Credit Administration blushing confessed to being 15 years old on May 27, so blushing that they told *USDA* nothing about it, but their Grapevine let out a muffled roar on the subject. Created by Executive order dated March 27, 1933, it actually came into existence 2 months later. Its old home was at 1300 E Street NW., Washington, D. C., as some of you may remember, and Henry Morgenthau, Jr., became its first Governor, he having been Chairman of the Farm Board since the previous March. W. I. Myers became second Governor when Mr. Morgenthau became Secretary of the Treasury on November 16, 1933.

Medals

Maj. Gen. Lewis B. Hershey, Director of the Selective Service System, recently awarded Congressional Selective Service Medals, at a ceremony in his office, to James L. Buckley, Assistant Director of Personnel, Henry D. Abbott, Assistant to the Chief of SCS, and Wm. P. Kramer, Chief, Division of Operation, FS. The awards were granted for services rendered in connection with *USDA*'s administration of camps for conscientious objectors.

Eating with the Moores

Bureau of Human Nutrition and Home Economics has done another nice job with AIS-71, the 24-page bulletin called Food for Families With School Children. No other institution can do better in turning abstract nutrition knowledge into plain everyday facts useful for any family. This one, the Moores, is composed of Tom 16, Kay 14, Faith 11, Peter 8, and Pop and Mom. The bulletin plainly and readably tells what they should eat, and how to purchase, prepare, and store it. It gives a detailed food plan for a week with prices and supplies, and winds up with advice for families of the same size and composition which can spend \$37 to \$39 weekly for food instead of \$27 to \$29 as the Moores do. You'll find a copy of this publication mighty helpful; procure from Office of Information, *USDA*.

Home food preservation

On June 10, Secretary Brannan designated the week of July 19 to 24 as National Home Food Preservation Week.

In the magazines

Reader's Digest for June tells how "Entire Towns Abolish Flies" with the help of DDT. Alfred Stefferud, Yearbook editor, in "Air War on Pests," Science News Letter for May 29, describes the war waged on the gypsy moth, tussock moth, and other destructive forest insects. Again *USDA*'s DDT comes to the rescue, this time in the form of an airplane spray. Woman's Day for June devotes a page to "Money-Saving Main Dishes," new 48-page booklet prepared by the Bureau of Human Nutrition and Home Economics. Life Magazine, for May 10, carried some excellent photographs of the new farm kitchen design by *USDA* home economists. Incidentally, the kitchen was also pictured in a Swedish publication, "Jordbrukarnas Föreningsblad," under the title "Köket som amerikansk önskedröm." We hope a couple of you Swedes will tell us what that means.

Career Secretaries

Mr. Brannan is the fourth career Secretary of Agriculture. The first was the late Howard M. Gore, Secretary from November 22, 1924 until March 4, 1925, and previously employed in Packers and Stockyards Administration. The second was William M. Jardine, Secretary from March 5, 1925 until March 4, 1929, and previously—though years earlier—an assistant cerealist in Bureau of Plant Industry. The third was Claude R. Wickard, Secretary from September 5, 1940 until July 1, 1945, and since then Administrator of REA, who before being Secretary was in AAA.

After 42 Years

Miss Sarah L. Acker, veteran engineering draftsman, has retired after 42 years with the Forest Service, having entered it in 1906, as a copyist topographic draftsman. She gained special recognition for her skillful drafting of administrative maps of the national forests. During the war, when the FS Engineering Division took on special war work, she worked on aeronautical charts for the Army Air Forces, on foreign defense maps for the Army Engineers, and on invasion maps of the Pacific theatre for the Navy.

Wesley McCune

Secretary's Memorandum No. 1216, June 9, announced the appointment of Wesley McCune as Executive Assistant to the Secretary. Mr. McCune, who is a graduate of the University of Colorado, at one time engaged in farming with his father in the northeastern part of that State. In 1939-40, he served as economic analyst with the Food Stamp Program. Since then, except for service in the Merchant Marine during World War II, he has been a Washington reporter for Newsweek, Time, and Kiplinger, as well as a well-known author of books and articles on various subjects, including agriculture.

Origin, Structure, Functions

USDA Document No. 1, revised March 1, entitled "Origin, Structure, and Functions of the U. S. Department of Agriculture," and sole publication containing current information of this sort, is again in supply. It carries a functional chart of *USDA* as of January 2 last. For one up to six copies write the editor of *USDA* or phone Miss Arden, extension 4649; you can send messengers to Miss Arden's room, 535A. If you wish. For copies in quantity either borrow our stencil or else have one of your own cut from our carefully cleared copy.

Secretary Brannan said—

In a statement issued June 2, the morning he was sworn into office, Mr. Brannan said, in part: "The Department of Agriculture has made an excellent reputation for integrity and businesslike administration in its dealings with farmers, businessmen, and others. This reputation is due in large part to the ability of Department employees, to their devotion to duty, and their willingness to work as a team. With full faith in them, I undertake my new duties confidently." To get the entire statement write Press Service, *USDA*, and ask for No. 1148.

Rural Reading Tastes

In the May 10 issue of *USDA* there was comment under this head. We now suggest that all interested in what rural people like to read, how much they can afford to spend for books, and how commercial publishers seem to be missing a huge mass market—get Publishers' Weekly for May 22, and carefully peruse Robert West Howard's The Billion Dollar Furrow. He estimates the untapped rural market to be worth a billion dollars annually, when publishers get wise. He used a questionnaire to get his basic facts. He says: "The core of the replies is a downright annoyance with the shortcomings of both book publishers and writers, and a conviction that there is complete absence of understanding of either the rural market's book interests or currently desperate needs."

Impulse buying

You can't conserve food if you are an impulse buyer. Business Week for May 22, reports a survey which showed that 38.2 percent of the items sold in supermarkets were unplanned purchases bought on pure impulse. The figure was found to be 30 percent for stores with clerks, so clerks are not too much of a factor in promoting the urge to splurge. But packaging is! About 46 percent of the items purchased were planned in advance, 22 percent were not planned specifically but formed part of the housewife's general intent, 2 percent were substitutions, and the remaining 30 percent were wholly unplanned purchases. Highest in unplanned purchases run candy, frozen fish, cookies and biscuits, frozen fruits, cake, sweet rolls, jellies, jams, relishes, and spreads. What's the answer? Make a sensibly planned list before you go to the store, adhere to the list, and don't shop when hungry!

Errors in June 21 *USDA*

The money figure in the item headed "New lab." page 8 should have been \$250,000 RMA grant for AIC's new Research Laboratory; our typist can think only in millions! Also we can spell "irresistible," line 2, column 2, page 1—that is after numerous experts in orthography told us how—and we always did spell it correctly every other Whitsuntide.

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Address correspondence to Editor of *USDA*, T. Swann Harding, Office of Information, U. S. Department of Agriculture, Washington 25, D. C. Washington or field employees, please write instead of phoning.



Fig. 840

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AUG 11 1948

FOR JULY 19, 1948

New Under Secretary

THE APPOINTMENT of a new Under Secretary of Agriculture was announced June 26. He is A. J. Loveland, who has been Director of the Agricultural Conservation Programs Branch, Production and Marketing Administration, since December 1947. He took the oath of office on the morning of June 30.

Mr. Loveland has been a farmer since 1914, operating in Bremer County, Iowa. He was elected Jackson Township AAA Committeeman in 1935, Bremer County AAA Committeeman the same year and, in 1941, became chairman of the Iowa State AAA Committee. His branch in PMA plans and directs the Agricultural Conservation Program, carried out nationally under the Agricultural Adjustment Act of 1938.

Lambert resigns

DR. W. V. LAMBERT, Administrator, Agricultural Research Administration, has announced his resignation to become dean of the School of Agriculture and Director of the Experiment Station at the University of Nebraska, his home State, on October 1. He was born in Stella, Nebr., in 1897, and took his B. S. at University of Nebraska. He took his M. S. at Kansas State and his Ph. D. at the University of California.

From 1936 until 1940 he was in charge of USDA's investigations in animal genetics. Then he became Associate Director of the Indiana Agricultural Experiment Station (Purdue), but returned, in 1945, to serve as Assistant Administrator, ARA. He became Administrator in 1946. He was a member of the United States delegation to the Food and Agriculture Organization of the UN when it met in Copenhagen, in 1946, and again at its Geneva Conference, 1947.

A. K. Fisher

On July 1, 1885, a Branch of Economic Ornithology was established in the Department's Division of Entomology. In 1896, it became a Division, in 1905, the Bureau of Biological Survey. July 1, 1939, it was transferred to the Department of the Interior and became part of Fish and Wildlife Service. It was created largely because the American Ornithologists' Union, formed in 1883, insisted. Its first head, selected by the Union, was C. Hart Merriam, nominated by Henry W. Henshaw; Merriam served a quarter of a century and was then succeeded by Henshaw himself.

A man who entered the Department in 1885 with Merriam, to be cofounder of this new agency, has just died in Washington at the advanced age of 92—Dr. Albert Kenrick Fisher. Dr. Merriam, Dr. Fisher, and a single clerk comprised the agency's full initial staff. Later A. K. Fisher had charge of economic ornithology and he retired in 1931, after more than 46 years of service. His main studies were in the fields of bird migration and food habits of birds of prey. He was author of many distinguished papers, monographs, and reports. His book, *Hawks and Owls of the United States*, was a classic.

He was a member of the famous Death Valley Expedition in 1891, which surveyed portions of California, Nevada, Arizona, and Utah, and inspired other similar surveys. He was also a member of the Harriman Alaska Expedition in 1899, and of the Pinchot South Seas Expedition in 1929. He was always a leader in conservation movements and was a personal friend of Theodore Roosevelt, Gifford Pinchot, and Henry C. Wallace.

Born in Ossining, N. Y., in 1856, he took his M. D. at Columbia College of Physicians and Surgeons, but renounced medicine to become a naturalist. In recent years he lived at the Cosmos Club. He died June 12, after a brief illness.

On July 1, the Bureau of Human Nutrition and Home Economics became a quarter century of age. But it has had a long background in other forms. For instance, the first appropriation (\$10,000) for work in the field of human nutrition was made by Congress in 1894. Planning that program was undertaken by the father of nutrition science in America, W. O. Atwater, who was at the time head of the Office of Experiment Stations. From this nucleus sprang the Office of Home Economics which along with the experiment station and cooperative extension work, formed the States Relations Service about 1915. At that time Office of Home Economics added research in clothing, household equipment, and work methods to its nutrition studies.

Passage of the Smith-Lever Act, in 1914, opened the way for a Nation-wide program of home demonstration work. But at every turn the agents were confronted by questions they could not answer. Things came to a head during the administration of Secretary Henry C. Wallace, as pressure increased for more facts on a myriad of home problems. Finally, on July 1, 1923, the Bureau of Home Economics was created. In 1943, this Bureau took over some protein research long carried on in the old chemistry bureau, and became the Bureau of Human Nutrition and Home Economics. It has had only three heads: Louise Stanley, Henry C. Sherman, and Hazel K. Stiebeling.

The three major objectives of this bureau are: (1) To find out more exactly the basic needs for food, housing, clothing, and other goods and services essential to everyday living; (2) to attain more precise knowledge of the goods and services that can satisfy human needs; and (3) to determine what American families actually buy and use in their everyday living.

The Bureau has units devoted to Family Economics, under Dr. Margaret G. Reid; Housing and Household Equipment, Miss Lenore E. Sater; Textiles and Clothing, Mrs. Bess V. Morrison; and Food and Nutrition, Dr. Esther L. Batchelder. Miss Ruth O'Brien, who pioneered in its textile work, is now an Assistant Chief of the Bureau, as is also Dr. Callie M. Coons. Much of the Bureau's work is carried on in a special building at Agricultural Research Center, Beltsville, Md. The Family Economics Division and the Information and Administrative offices are in South Building.

Farmer's Handbook

WHILE THE VOLUME of the above title is unlikely to put the Department of Agriculture and the Extension Service out of the business of answering innumerable questions for farmers, amateur farmers, would-be farmers, and near-farmers, it is an interesting and valuable compendium of authoritative information for every farmer and gardener. It was produced over a period of years by John M. White, county agent, agricultural adviser, and member of Oklahoma A. & M. extension service. He apparently arrived at it by crossing a farm encyclopedia with a handbook; the hybrid works out very well and has many of the utilities of both parents. Hybrid vigor set in here.

In short, here you will find, well filed away in readily usable form, scientifically checked information on grain crops, legumes and grasses, fiber and oil crops, sugar crops, garden and truck crops, trees, orchards, berries, beef and dairy cattle, the equine race, sheep, goats, poultry, rabbits, feed and feeding, soil conservation, beekeeping, fish and wildlife, some farm engineering, what to do 'til the doctor comes, the United States agricultural colleges and experiment stations, hydroponics, farm business papers—in short a little about a lot, but that little compact, concise, accurate, and practical. The book was issued by the University of Oklahoma Press and is priced at the bargain rate of just 5 cents less than \$5. Our Library has a copy.

Baldwin to England

Mark Baldwin of FAO's Agricultural Division recently left for England, at the invitation of the Commonwealth Bureau of Soil Science, to attend a Conference of Soils of the Tropics and Subtropics, to be held at Rothamsted Experiment Station. Our "retired" employees appear to get more active then than ever.

Brandes honored

Dr. Elmer W. Brandes, Chief of the Division of Sugar Plant Investigations and of the Division of Rubber Plant Investigations, Bureau of Plant Industry, Soils, and Agricultural Engineering, received one of the 1948 Alumni Awards for Distinguished Service at the commencement exercises at Michigan State College June 6. Dr. Brandes, a graduate of MSC in 1913, has been in the Department since 1918. He has made scientific explorations in various parts of the world mostly with the object of improving sugar and rubber plants. His travels have included the Orient, the South Pacific, Africa, South America, Europe, and Australia. As a result of his work and investigations under his direction, great progress has been made in the improvement of sugarcane, sugar beets and rubber-yielding plants, principally *Hevea brasiliensis*, the great rubber tree of the Amazon Valley.

Versatile Allard

HARRY A. ALLARD, who retired from the Bureau of Plant Industry, Soils, and Agricultural Engineering a short while back, has received an honorary doctor of philosophy degree from University of North Carolina. You probably remember his connection with the basic discovery of photoperiodism, the effects of length of day on plants. But, in a day of perhaps too close scientific specialization, his versatility is cause for comment. His breadth of interest covered such diverse subjects as plant viruses; climatology; lighting; plant and animal morphology, ecology, and geography; firefly flashing impulses; as well as the genetics and photoperiodism of plants and animals.

In all fields he displayed a rare, original type of thinking, and many times corrected false hypotheses or revised faulty interpretations of his predecessors. His tobacco mosaic studies were as brilliant as his photoperiodism investigations undertaken in collaboration with W. W. Garner. Little progress had been made in the study of this virus disease from 1892, when it was shown that it was infectious and the particles spreading the infection were minute, until 1912, when Allard took hold. His 11 papers focused attention on virus diseases as a whole, and inspired much fruitful research by many investigators. New concepts on the virus problem are directly attributable to him, and he had established an outstanding place in this field by 1918.

He proved that the virus remains ineffective in extreme dilution, and after prolonged desiccation; that it can be precipitated by alcohol; that it permeates all organs of the host plant except the embryo, and is transmitted by aphids, but not by other sucking insects; that there are symptomless plant carriers; and that different tobacco strains show different resistance. Allard's rare originality, keen observation, and outstanding reasoning ability were here used to a superlative degree.

They Needn't Have Died

This is the title of an unusual publication by George Vitas of Forest Service which Chief Lytle F. Watts of FS describes in his foreword as not a sermon on safety, nor a compilation of accident statistics. Instead it is the actual story of five FS men who were killed at work. Dramatically written, it makes absorbing reading. The back cover delivers the punch. As 13 FS men are marked for accidental death this year, unless they prevent the accidents from happening, this booklet bears a special message for the Service, but it applies as well to us all.

Shorthand, Ahoy!

THAT SHOULD BE sufficiently incongruous to make somebody stop and listen. The thing is, a list of Words and Phrases Frequently Used in Budget, Fiscal and Procurement Work has been developed which will help almost any stenographer. The list was developed by the girls in the Office of Budget and Finance. The Gregg Publishing Co. supplied the shorthand words, phrases, and shortcuts. B&F and the Office of Personnel are anxious to give you girls here and in field offices a chance to use this list. To get it, write directly to your Bureau Personnel or Training Officer here in Washington.

Suggestions to secretaries and stenographers for using the list:

- (1) Keep the list before you at all times for practice writing during slack intervals;
- (2) keep visible both the longhand and shorthand symbols during beginning practice periods;
- (3) select from the list words and phrases pertinent to your work;
- (4) concentrate on these first;
- (5) practice writing each word or phrase five or six times;
- (6) repeat to yourself each word or phrase as you practice writing it;
- (7) practice writing 8 or 10 words or phrases during each practice period;
- (8) after you have practiced 8 or 10 words and phrases, cover the shorthand symbols;
- (9) now, look at the longhand words and phrases and write the shorthand symbols;
- (10) if you are in doubt, refer immediately to the shorthand symbols;
- (11) repeat this process until you know the words and phrases;
- (12) you will notice slight deviations in the symbols found in this list and those found in other lists and in textbooks, so you use the form which is most feasible to you.

Bailey honored

The American Agricultural Editors Association has made its initial award for outstanding service to agriculture to Dr. Liberty Hyde Bailey. The award was made on the evening of June 26, at Cornell, by Paul D. Sanders, president of the association and editor of the Southern Planter—which is not a mortician's gazette, no matter what you think, but a very old and respectable farm journal. Dr. Bailey is still making his long solo air trips at the advanced youth of 90—he has a journey to Africa coming up. Born in 1858, near South Haven, Mich., he joined Cornell faculty in 1888, after doing masterful work in Michigan. Before his retirement, in 1913, the Cornell agricultural faculty had increased from 11 to 100, and the student enrollment from 100 to 1,400.

Titles that intrigue

Foreign Agriculture for June, published by our Office of Foreign Agricultural Relations and edited by Hally H. Conrad, leads off with a comprehensive article on Rice—A World Crop, and also contains articles on tomatoes From a Tree (actually *Cyphomandra betacea*), or Peruvian tree tomatoes, and on Mobilizing Our Science for World-Wide Cooperation. Then there is Eric Englund's long and informative discussion of Finland's agriculture. Eric, formerly Chief of OFAR's Regional Investigations Branch, is now Agricultural Attaché assigned to Stockholm and Helsinki.

Story of a citation

SALVAGE OF ONE of the most valuable collections of sugar plant breeding material in the world from damage by two hurricanes last fall won that Superior Award unit citation for employees of the United States Sugar Plant Field Station, Canal Point, Fla. Potential value of the sugarcane breeding material which has been collected in the tropical belt and other areas during the past 30 years is reckoned in millions. It is the nursery from which parent stock for most of the improved hybrid commercial varieties has come in recent years. Much of it could not be replaced.

The cane plants in a 20-acre field near Lake Okechobee were flattened by the first hurricane and then flooded when another storm breached the dike holding the lake waters. The second hurricane also uprooted about 100 trees which fell on the prostrate cane. Although it involved many hazards and required the most careful planning, underwater salvage by teams of men working from boats offered the only practical method of retrieving the cane plants from the chaotic tangle in the deep water. So efficiently was this difficult and disagreeable task carried out by Maj. Bascom A. Belcher and his eight associates that more than 95 percent of the valuable cane varieties was saved.

Brief but important

The atom, fact or fancy

Morse Salisbury, formerly USDA's Director of Information and now with Atomic Energy Commission, made a brief talk over at USDA not long ago in which he stressed the necessity for public reeducation regarding the nature and utility of atomic energy. He implied that the Buck Rogers school of science had given atomic fission a bad name. No better could you begin this process of reeducation than to read Realism and Fantasy in Atomic Energy, a speech made not long ago by Atomic Energy Commissioner Sumner T. Pike. He clearly and interestingly differentiates between fact and fancy in this field. If you want a copy write the editor of USDA or phone Miss Arden, Ext. 4649.

Fiction shows science how

Science-fiction sounds contradictory. But there are an interesting two pages in the May Atlantic which tell how these two inspire each other. Television is cited as a perfect example. The fiction writers told of the possibilities of television. Someone estimated that the public would pay as much as a billion dollars for sets. So the scientists were inspired to produce them. Radar too came from fiction. The fact is, says John W. Campbell, Jr., that many of the country's capable scientists read science-fiction * * * some of them write it! That the fiction writers had cracked the riddle of atomic energy long before the scientists is common knowledge. Life does imitate art; action does stimulate science.

Frank K. Woolley

PMA Administrator Ralph S. Trigg announced, June 15, that Frank K. Woolley would succeed him as Deputy Administrator. A native of Oklahoma, Mr. Woolley graduated from Kansas City University and took advanced study at George Washington. He was engaged in agricultural and commercial work before entering AAA in 1933, with which agency he served a decade in Washington and the field. He transferred to WPB in 1942, and served as Chief of its Services Program Branch, until he returned to USDA in 1943, first to Office of Agricultural War Relations, then to WFA. He was in the Navy 1944-45, and since then has been in PMA as Assistant Director and later Director of the Budget and Management Branch, and as Deputy Assistant Administrator for CCC, in which position he has been serving as Acting Assistant Administrator. He has also been Secretary of CCC since February 1946.

Well, that's settled

The Rockland County (N. Y.) Beekeepers Association, at the expense of 15 lumps and 15 lives, proved in mid-June that a female bee definitely does die after plugging her stinger into genus *Homo sapiens*. She cannot unscrew the stinger and fly merrily off to sting another day, for every time she flew off and left it behind she definitely died as a result of sitting down on a man's arm and pushing. The bees either don't know it is suicide to indulge in such behavior, or else they don't give a buzz. Somebody ought to tell them these things!

What's new in ARA?

Well, Frank H. Spencer as Assistant Administrator, for instance, an appointment announced by Administrator Lambert on June 17. A career employee of more than 30 years' service, Mr. Spencer entered Bureau of Animal Industry in 1917, served subsequently in Bureau of Markets, Division of Publications, and Office of the Secretary, entered Bureau of Entomology and Plant Quarantine in 1931, and became its Assistant Chief in 1941. His training and experience are in business administration. He is succeeded in EPQ by Edmund Stephens, a graduate of Oregon State, who has been in USDA since 1930. Entering as an agronomist, he later served with the Director of Finance and with Bureau of Plant Industry, Soils, and Agricultural Engineering. He has been budget officer of ARA since 1946.

Awardees

Dr. Gotthold Steiner, nematologist with Bureau of Plant Industry, Soils, and Agricultural Engineering, who got that Superior Service Award, is a native of Switzerland—now an American citizen, who has been with USDA since 1921. He is the leading world authority on nematodes. He has recommended methods of soil fumigation which prevent nematode attack on the roots of many important economic plants, and this has greatly increased yields of sugar beets, truck crops, ornamental seed crops, cotton, lespedeza, figs, watermelons, and many others. Dr. Perley Spaulding, of the same Bureau, also a Superior awardee, is a native of Vermont and a world authority on forest pathology. His early classic research on white pine blister rust resulted in a control program now effective on millions of acres from coast to coast. He has also made extensive studies of northern hardwood cankers, devised means of reducing heart-rot losses of balsam fir, and recommended many valuable forest management practices. He has the largest existing index (150,000 cards) of information on forest diseases.

Poland report

The report of the FAO Mission for Poland appeared dated May. Paul J. Findlen, of Extension Service, and Edward N. Munns, of Forest Service, were members of this mission, as was former USDA staff member Mordecai Ezekiel. This is a handsome and informative document. It and other FAO publications may be purchased from FAO Document Sales Service, 1201 Connecticut Avenue, NW., Washington 6, D. C.

Wax, soy, protein fiber

If interested in any of these, some of you might care to read an article on Wax From Sugarcane, in the December issue, A Remarkable Bean is the Soy, in January, and Making Big Ones Out of Little Ones (popular treatment of making protein fibers) in February issue of American Journal of Pharmacy, published in Philadelphia and available in our Library. The editor of USDA—see last-page masthead—has a very few stapled tearsheets of each.

Cardon honored

In addition to receiving a Distinguished Service Award from USDA recently, Dr. Philip P. Cardon, Special Assistant to the Chief, Bureau of Plant Industry, Soils, and Agricultural Engineering, received an honorary doctor of laws from Utah State College on May 28. He at one time headed the Agricultural Research Administration, until advised by his doctors to drop work requiring heavy administrative pressure. Dr. Cardon is an agronomist who held several distinguished posts before entering PISAE in 1935.

Neil W. Stuart

Dr. Stuart, USDA plant pathologist, flew to England June 5 for a 3-month survey of agricultural research in Great Britain. He is a member of the staff of the United States Mission on Science and Technology, composed of leading scientists the Nation over. He, Dr. C. J. Willard, an agronomist from Ohio State, and Dr. J. L. Lush, an animal geneticist from Iowa State, comprise the three agricultural scientists on the staff.

Scientific American

Two or three issues of the new Scientific American have appeared. It offers rather heavy going unless the reader is pretty well trained in some of the physical sciences and mathematics. It is strong on photography, as might have been anticipated, Gerard Piel, formerly of Life, being an editor. The articles tend to be long as well as rather technical. For instance, George W. Gray writes even more technically than he did a few years ago for Harper's Magazine. But the facts are there, the accuracy is unimpeachable, and if you like really meaty, difficult reading in the field of science, we recommend this rather handsome rejuvenated Scientific American.

Exhibits

Rural Electrification Administration sends in a processed piece on the preparation and use of exhibits, for distribution to their co-ops borrowers. It consists of a 16-page booklet plus an envelope containing descriptions and diagrams of seven exhibits designed to tell as many REA stories. The booklet graphically tells how, the three basic rules being: Know your audience; tell a simple direct story applicable thereto; and provoke audience participation, if possible, a gadget to work, a switch to throw, etc. But the ideas throughout are applicable not only to REA. Many in other agencies may be interested. If that includes you, REA has a few extra copies and you can procure one from their Information Division, Room 1818 S.; write or phone.

USDA budget

After conference, as printed in Congressional Record, total direct and permanent USDA appropriations for the 1949 fiscal year are \$723,874,080, plus \$400,000,000 in REA borrowing authority, making a grand total of \$1,123,874,080. The figure for the 1948 fiscal year was \$1,192,877,708.

Weed-killing flights

Following many complaints that drifting 2, 4-D dust had injured cotton and other broad-leaved crops, the dispersion of weed-killing 2, 4-D dusts from airplanes was prohibited, June 21, by D. W. Rentzer, Administrator, Civil Aeronautics Administration, at the request of the USDA. If you have further interest in this subject you will find details in press release No. 1293; write Press Service, USDA, for it.

Done before

Sam R. Hoover, of the Protein Division, Eastern Regional Research Laboratory, writes in to say that work of the kind mentioned under the heading "Smarter than we thought," *USDA* for May 24, page 6, had been done earlier. He states that old Bureau of Soils Bulletin 87 (1917) by O. Schreiner and J. J. Skinner, and other sources reported that plants could use amino acids directly as their source of nitrogen. This we are glad to hear. The item, like many others, was published to excite comment, and comment *USDA* is always happy to get.

After 45 years

S. F. Sherwood has retired from the Bureau of Plant Industry, Soils, and Agricultural Engineering, after more than 45 years of service, having entered at 16 as a student assistant. His first assignment was to work with Dr. Harvey W. Wiley's famous "poison squad" in the old Bureau of Chemistry. He was long employed there in the sugar laboratory, but transferred many years ago to the Division of Sugar Plant Investigations, PISAE. Seems the new retirement law finally made retirement more attractive than work, for Sydney must have another good 45 years of service in him.

Honorary degree

In recognition of his outstanding wartime research in the dehydration of fruits and vegetables, Maryville College (Tennessee) recently awarded a doctorate of science to Dr. Joseph S. Caldwell, Bureau of Plant Industry, Soils and Agricultural Engineering. Dr. Caldwell, who came to the Department in 1918, is the author or coauthor of 120 technical articles and bulletins on the determination of factors of quality and on the preservation of fruits and vegetables.

Award to Watts

Lyle F. Watts, Chief of Forest Service since January 1943, received an honorary degree of doctor of agriculture in June. He also received an Iowa State College Alumni Merit Award in June for his achievements in his chosen field. He received his bachelor's degree in forestry at Iowa State, in 1913, and joined FS at once, and until 1928 he served in various capacities on western forests. He then organized the School of Forestry at Utah Ag. In 1936, he became regional forester for the North Central States and, in 1939, for the Pacific region. Secretary Wickard appointed him, in 1942, to coordinate farm labor activities.

Dry, eh?

Foxtail Johnson says in the Arizona Farmer, "I sure wish we could have a ball game around here to postpone on account of some rain we had around here."

Telling the public

We still have some copies of that talk by the editor of *USDA*, entitled "The Importance of Accurate Information." If you are at all interested in the dissemination of information—and remember that our organic act charges us to diffuse knowledge—you might find something useful in this discussion. To get a copy, write the editor of *USDA* as per page 4 masthead. A few copies also remain of Should Editors Be Exterminated?

Bird honored

Dr. H. R. Bird, in charge of poultry research for the Bureau of Animal Industry, at Beltsville, Md., has become the first American scientist to win the American Feed Manufacturers Association award of \$1,000 for an outstanding contribution to the science of poultry nutrition. The award was made at Colorado A. & M., June 23, by Dr. P. R. Record, vice chairman of the association's nutrition council. Dr. Bird's research featured the most efficient utilization of soybean oil in poultry feeds. Dr. Bird has been in charge of poultry nutrition for *USDA* for the past 5 years. He previously headed similar work at University of Maryland, and took his degrees at University of Wisconsin.

My aching back!

Yes, and yours too. And if you want to know more about it, let us suggest a reading of *The Back and Its Disorders*, by Dr. Philip Lewin, published at \$2.50 by Whittlesey House, New York City. If, however, your aches are mostly neurotic in nature we suggest Dr. William C. Menninger's *Psychiatry in a Troubled World*; he prescribes some excellent remedies for frustration and psychic backaches.

The browsing eye

Noted while reading the Scientific Monthly for June: The fascinating discussion of Conflicting Doctrines About Soils, by Charles E. Kellogg, of PISAE—well-written, naturally, for Dr. Kellogg is one scientist who really knows how to write; Melvin Rader's *Technology and Community*; and, for you editors and information people, a Report on Releasing the Results of Research to the Public, headed "Advice to newcomers," prepared by a committee in the College of Agriculture, University of Wisconsin, and unanimously adopted by the faculty.

In transit

According to figures compiled by the National Livestock Loss Prevention Board, damage to animals in transit by rail or truck resulted, in 1947, in a loss of almost 70,000,000 pounds of meat and just short of \$25,000,000. This loss, in turn, represents wastage of 4 to 6 million bushels of grain—the average wheat crop of Iowa has been 6½ million bushels in recent years. That quantity of grain would have supplied for a year the major food-grain needs of 700,000 underfed Europeans or others.

Hybrid corn

You may not wholly agree, but you might find much to interest and instruct in *The Hybrid-Corn Makers: Prophets of Plenty*, by A. Richard Crabb, from Rutgers University Press, and available in our Library. Henry A. Wallace, Frederick D. Richey, and other former Department worthies have their place in the story. Richey is, of course, both former and present, for he is still principal agronomist with the Bureau of Plant Industry, Soils, and Agricultural Engineering at Knoxville, Tenn., coordinating the southern corn program and working on corn production, breeding, and genetics.

Swedish history

Their Road Led West, or how Swedish pioneers furnished a million of our farmers from a country with 7,000,000 people, is told by Everett E. Edwards, agricultural historian of *USDA*—he works in BAE—in the June issue of *The American Swedish Monthly*.

Profits in waste

Seeing profit in waste is one of the special gifts of the Western Regional Research Laboratory. About 70,000 tons of asparagus butts are discarded annually by processing plants, so the Lab's scientists have found out how to produce concentrated asparagus juice therefrom, which is a satisfactory medium for growing a number of micro-organisms, among them the *Bacillus subtilis* that produces the newly identified antibiotic, subtilin. More recently they have found that waste from canning pears is suitable for growing high-protein, high-vitamin yeast to become part of poultry feed. There are a hundred thousand tons of this pear waste a year, and half that much used for yeast manufacture could be made to produce 1,500 tons of concentrated feed worth \$250,000. These fellows see dollars where most of us see garbage!

Europe's needs

The Role of American Agriculture in Rehabilitating Europe, a talk delivered by Nathan Koenig, Executive Assistant to the Secretary, at Rutgers University June 12, contains a lot of information about European crop conditions and needs, readably expressed. Mr. Koenig draws on his own experience during trips to Europe and Asia for excellent illustrative material. If you want to know more about what Europe needs and why, write Press Service, USDA, and ask for No. 1235.

How families spend

A new Miscellaneous Publication (No. 653) has just appeared entitled "How Families Use Their Incomes." It was prepared by the Family Economics and the Information Divisions of the Bureau of Human Nutrition and Home Economics, and consists largely of tables and charts. It deals with recent trends in income and in spending, patterns of spending and saving, expenditures for food, clothing, housing, medical care, and the number and composition of United States families. Here is a wealth of information on the economic position of the Nation's city and farm families, showing how they expend their incomes for the needs and wants indicated, all for 30 cents (but not in stamps) from the Superintendent of Documents, Government Printing Office, Washington 25, D. C.

Errors, contd.

Anent the last item in *USDA* for July 5, a BENHE physicist reminds us that our typist does not always think only in millions. For, in "Entomology lesson," page 4, June 21, issue, she let us define a microgram as a thousandth instead of a millionth of a gram. That vindicates her. Thanks!

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USDA

FOR AUGUST 2, 1948

Appropriation changes

CONGRESS authorized 262.5 million dollars for the 1949 agricultural conservation program, up from 150 million dollars appropriated for the 1948 program. The maximum payment authorized to be made to participants is increased from \$500 to \$750. School lunch funds from section 32 segregation were increased from 70 million dollars made available in 1948, to 75 million for 1949. Nearly 60 million was made available for surplus farm commodity purchases, as compared with 84 million dollars last fiscal year.

Farmers Home Administration expects to help several thousand additional farm families the coming year as a result of additional funds under the new appropriation act. In addition, changes in the insured mortgage provisions of the Bankhead-Jones Farm Tenant Act should make possible an assured market for FHA's insured mortgage loans. Under the new appropriation act Rural Electrification Administration will have 500 million dollars for loans, 200 million more than ever before. An increase of \$5,705,242 will permit some expansion of Soil Conservation Service operations and research the coming fiscal year.

The Extension Service gets an increase of 3 million dollars, virtually all of which will go to strengthen State and county work. There is also an increase of \$134,000 in Bankhead-Jones funds for Puerto Rico. The appropriation for the Research and Marketing Act is 13.85 million dollars, an increase of a little over 50 percent, but short of the 19 millions authorized; the greatest increase of all is for work on marketing. Congress also appropriated 6 million dollars to FHA for emergency loans to flood-stricken farmers this fiscal year.

BUY U. S. SECURITY BONDS NOW!

CCC management

THE NEW MANAGER of Commodity Credit Corporation, Elmer F. Kruse, was formerly Assistant Administrator of Production and Marketing Administration for Commodity Credit Corporation operations. Born and reared on an Auglaize County, Ohio, farm he has operated his own general crop and livestock farm therein for 30 years. He was elected chairman of the original AAA committee in this county in 1933, was appointed State AAA fieldman for Ohio in 1935, and became chairman of the State AAA committee in 1936. In 1947, he came to Washington as PMA Administrator's fieldman for the North Central States. He has had extensive experience in and with cooperatives and farm organizations.

The new assistant manager of CCC is Harold K. Hill. He has long experience with agricultural operations and administration, and has been associated with USDA for 14 years, mainly in field work on production and marketing programs. He became special assistant to the Director of PMA's Field Service Branch in 1945, then area director for Federal Crop Insurance Corporation, and more recently he has been a field representative of PMA's Grain Branch. Born in Wisconsin, he operated his own dairy and livestock farm at Prairie Du Sac for 14 years.

Reclaimed waste

The National Canner's Association reported recently that wastes from canning 10 vegetables and 6 fruits total more than 4½ million tons annually in the United States. This total does not include already largely salvaged citrus wastes. But this other waste has high potential feed value, leafy wastes being particularly rich in carotene, riboflavin, and high-quality protein. Department research is already under way on improved drying methods and equipment to handle this waste, feeding tests and best use of the product, and developing further demand for it.

Farm act provisions

UNDER THE FARM Act enacted by the Eightieth Congress, the basic crops—corn, wheat, cotton, rice, tobacco, and peanuts—marketed before June 30, 1950; hogs, chickens, eggs, milk, and milk products marketed before January 1, 1950; and potatoes harvested before January 1, 1949, are to be supported at 90 percent of parity. Edible dry beans and peas, turkeys, soybeans, and flaxseed, and peanuts for oil, American-Egyptian cotton, sweetpotatoes, and potatoes harvested after January 1, 1949, are to be supported until January 1, 1950, at levels which may range from 60 percent of parity to the 1948 level of support. Wool prices are to be supported at present levels until June 30, 1950. Price supports for other agricultural commodities during 1949 are to be carried out to the extent funds are available.

Beginning January 1, 1950, price supports for the *basic* commodities, except tobacco, will range from 60 to 90 percent of parity, depending upon the supply at the beginning of the marketing year. When acreage allotments or marketing quotas are in effect, price support will be increased by 20 percent (but not above 90 percent of parity). Price support for tobacco is directed at 90 percent of parity when marketing quotas are in effect. Wool is to be supported at 60 to 90 percent of parity—at whatever level the Secretary determines is necessary to encourage the annual production of 360 million pounds of shorn wool. The Secretary may support prices of *nonbasic* commodities at any level up to 90 percent of parity.

The general level of parity prices will continue to be based on the 1910-14 period, but the relationship among the parity prices for individual agricultural commodities will be based on the immediate past 10-year period of actual prices. There is also a provision to prevent parity prices for individual commodities from dropping more than 5 percent per year below parity prices as they would be calculated under the present formula.

Better health

How better health is being achieved through agricultural collaboration in the Western Hemisphere is explained by Quincy Ewing in an article in *Foreign Agriculture (FAR)* for July. It tells more about the program carried on by USDA in cooperation with the other Americas, which the recent sessions of the Fourth International Congresses on Tropical Medicine and Malaria served to emphasize. The same issue of *Foreign Agriculture* also contains Leo J. Schaben's informative article on Corn's Role in Feeding the Hungry.

Successful big bank

THE BANKS and corporations of the Farm Credit Administration have provided farmers and their cooperatives with about 14 billion dollars since 1933, to finance farm operations, marketing, and farm ownership.

The 12 Federal land banks began in 1917 with about 9 million dollars of Government capital, *which was mostly repaid by 1926*. During depression years the Government subscribed 125 million dollars in capital stock and also some 189 million in paid-in surplus to these 12 banks. *By June 1947 this had all been repaid and the land banks are now operating entirely without Government funds*. Since organization they have made long-term mortgage loans (up to 30-odd years) to more than a million farmers totaling more than 4 billion dollars. They have built up legal reserves and earned surplus of 199 million dollars, besides meeting losses amounting to slightly less than 3 percent of the total loaned. They have paid dividends of 54 million dollars to their stockholders, mostly farmer-owned national farm loan associations.

The 12 Federal intermediate credit banks, since organization in 1923, have had Government capital of 60 million dollars except in the depression when it totaled some 40 million dollars more. These banks have paid the Government franchise taxes totaling \$7,180,675, and have made loans and discounts aggregating 11 $\frac{3}{4}$ billion dollars. Reserves, earned surplus, and undivided profits total 35 million dollars. *Losses have amounted to only one-half of 1 percent of the total loans and discounts made*.

The 12 production credit corporations in 1933 had 120 million dollars in Government capital to use, in part, to capitalize and start off the local production credit associations. Since 1933 the corporations have accumulated earned surplus of 16 $\frac{1}{2}$ million dollars and have repaid 38 $\frac{1}{3}$ million of the Government capital to a revolving fund of the United States Treasury. The Government capital in the associations has dropped from a peak of 90 million dollars to 31 million. Since 1933 the PCA's have loaned farmers nearly 6 billion dollars for crop and livestock production, and have accumulated reserves of 43 $\frac{1}{3}$ million dollars. *Their net losses amount to about one-twelfth of 1 percent of total cash loaned*.

The 13 banks for cooperatives were capitalized with part of what remained from the revolving fund of the Federal Farm Board. The amount of Govern-

ment funds now in the banks is 178 million. A plan is being worked on to make these banks entirely owned by the borrowing co-ops. Since their organization, in 1933, they have provided credit totaling 3 $\frac{1}{2}$ billion dollars to farmers' cooperatives with a membership of more than 2 $\frac{1}{2}$ million farmers. They have built up about 45 million dollars in reserves and earned surplus, and *losses on loans have been only three-hundredths of 1 percent of the amount advanced*.

Harvesting farm timber

ONE DRAW-BACK to farm timber growing has been the difficulty of harvesting the crop. Most farmers have preferred to sell their timber crop as it stood because of the hard work and the equipment needed. That situation is being changed rapidly by new timber-harvesting machinery. About a half a million dollars worth of new machinery was demonstrated recently at the Eastern Seaboard Logging and Equipment Show at the University of Maryland. The biggest piece of such equipment, the portable sawmill, costs about \$5,000.

Nowadays, many woodland owners are cutting their trees with a small portable power saw. The logs can be skidded in with a tractor and loaded on a truck with a power loader. The truck is driven alongside the log and the hinged arms of the loader are lowered to the ground. The log is rolled on the arms and then a cable from a winch operated off the truck's drive shaft raises the arms and the log is tossed aboard the truck.

The biggest piece of equipment is the portable sawmill. It is usually operated by a separate Diesel engine. Some of these sawmills can be set up in 2 hours. Operators have found that they can afford to set up to saw as little as a thousand feet of lumber.

Much land east of the Mississippi River should be growing trees to conserve both soil and water, as well as to bring money to the farmers. Forest Service officials estimate that for every acre of cropland in that area there are three-fourths of an acre that should be producing timber crops. In 22 of these States planting and care of trees is an approved Agricultural Conservation Program practice.

How printing has changed

Many who are not printers will find much information of value in an article entitled "Look At This, Mr. Gutenberg," by C. Lester Walker, in Harper's Magazine for July. It has reached the point now where you almost put the author in one end of the machine and get his printed article or book out the other.

CCC charter

UNDER LEGISLATION recently approved, the Commodity Credit Corporation was given a Federal charter and it became a permanent agency. Its directors are to be appointed by the President, with the consent of the Senate, and its business will be managed by the board of directors. Hitherto the Secretary has appointed the directors who have managed its business subject to his direction and approval. At least two of the directors must not be USDA or United States Government employees. The Corporation's executive staff will devote full time to its affairs.

Established October 17, 1933, by Executive Order 6340, October 16, 1933, the CCC was placed in USDA by Reorganization Plan No. I, as of July 1, 1939. It has had temporary status and has been continued from time to time by various acts of Congress. Since 1945, the Corporation, in carrying out price support, foreign supply, and other programs has made use of Production and Marketing Administration personnel and facilities.

From the date of its creation through June 30, 1947, the Corporation showed a net gain of \$102,158,232, exclusive of wartime subsidy programs. It is one of the biggest, most complex corporations in the world. Probably no private corporation could equal it in varied types of operation and their magnitude combined. From 1942 through 1947 its average total assets were slightly greater than those of General Motors, its inventories were twice as big, and it had almost as big a volume of sales.

CCC directors

The Secretary announced the appointment of the Interim Board of Directors for Commodity Credit Corporation in Memorandum No. 1118, June 30. Their appointments were effective midnight June 30, and will terminate October 1, 1948. They are Secretary Brannan, Under Secretary Loveland, PMA Administrator Trigg, Frank K. Wooley, who is PMA Deputy Administrator, and Lionel C. Holm, who is Assistant to the PMA Administrator.

CCC executive staff

At the first meeting of the Interim Board of Directors, Commodity Credit Corporation, the following were appointed to devote full time to CCC affairs: Manager, Elmer F. Kruse; Controller, Martin J. Hudtloff; Treasurer, James J. Somers; Assistant Secretary, Marlon M. Crumpler. Other appointments will be announced later.

Grazing rights

Bernard De Voto continues to fight with zealous indignation for Forest Service in the great battle over grazing rights. See his article, "Sacred Cows and Public Lands," and also his "Easy Chair," in Harper's Magazine for July.

More Cash Awards

SIX MORE employees get good cash money for adopted suggestions. All awards were made by agencies under delegated authority to pay awards up to \$25.

MARGARETTA HALL of *Farm Credit Administration* suggested that file tubs on wheels would add to the efficiency of filing operations. Her supervisor reported that Mrs. Hall's suggestion resulted in material assistance in the work of her section.

ROBERT S. BRODERICK of *Rural Electrification Administration* proposed a simplified procedure for notifying REA-financed co-ops of the impending expiration of insurance policies. The result—an estimated saving to the Department of \$640 per year.

ETHEL SCHOEN of *Production and Marketing Administration* proposed a new design of Form AD-282 that saved paper and preparation time to a total value of \$144.38.

ANNA SCHMID in the Spencer, Iowa, office of *Farmers Home Administration* proposed that an item in a loan voucher form be relocated. The change saves time in typing and results in a neater appearance of the completed form. ERIC L. THOMPSON of the Red Falls, Minn., office of *Farmers Home Administration* suggested that Form FHA-137 be revised. Result—processing of collection items will be facilitated and errors, correspondence, and cost reduced. BLONDIE SOTHART and BEATRICE STEWART of the Alexandria, La., office of *Farmers Home Administration* jointly suggested that Form FHA-579 be revised. The result—time saved in locating a borrower's account.

Wanted: More good ideas like these.

Flood aid

THE EIGHTIETH CONGRESS made available an appropriation of 6 million dollars to USDA for emergency loans to flood-stricken farm families during the current fiscal year. The fund will be administered by Farmers Home Administration with the technical advice and assistance of Extension Service, Forest Service, Soil Conservation Service, the State Colleges of Agriculture and Agricultural Experiment Stations, and other Federal, State, and community groups interested in helping farmers.

First use of the fund will be to supplement and extend farm restoration and relief programs operated by State and local forces in the flooded Columbia River Basin. Assistance will be directed by various agencies in their respective fields, largely working as a unit under supervision of George Hudson, representing the Secretary there. Loans will be restricted to farm families who have suffered damage resulting from flood and are unable to obtain adequate credit from other sources. No loans will be made to extend existing farm operations, since this is a program to offer relief from flood losses.

USDA: August 2, 1948

Brief but important

Brackeen steps up

Louis Brackeen who, for a number of years, has been extension editor in Alabama, has become director of the Alabama Polytechnic News Bureau. Robert R. Chesnutt, former assistant editor, has taken over as Brackeen's successor.

2,4-D and corn

2,4-D is capable of raising corn yields very considerably, when used properly; used improperly it can do more harm than good. You'll find some interesting details on this in BAE's *Agricultural Situation* for June, page 12. The issue also contains many other articles you'll no doubt want to read.

Typists

An office-equipment firm has just come out with an adjustable-height typewriter platform desk which they say they were prompted to develop as a result of interest shown by our Office of Personnel in correct typewriter heights. Remember Mrs. Audrey Johnndreau's lift boxes to raise typewriters to heights for most efficient performance? Do any of you still have them?

Government economics

Former Under Secretary Paul H. Appleby, who is now Dean of the Maxwell Graduate School of Citizenship and Public Affairs at Syracuse University, has a fine statement on *The Influence of the Political Order*, leading off the balanced symposium on *Formulating the Government's Economic Program*, which appears in the *Political Science Review* for April. The Library gets this periodical.

Who laid that egg?

Now it wasn't Bob Hope. According to the New York Times it was a couple of hens at Beltsville, Md., with the technical assistance of USDA's B. H. Neher. He removed unfertilized ova from the ovary of a hen that had just given her life for the cause, placed them in glass dishes, and then anesthetized a foster-mother hen and introduced an unfertilized ovum into her egg-laying tube, or oviduct. The incision was stitched, the hen speedily recovered, the ovum was fertilized by artificial insemination, and the egg grew and was laid. A healthy chick hatched from it. We may all have had forefathers, but this chick has certainly had two mothers.

Retiring workers

George Rousseau, stockroom supervisor in the Printing Section of Office of Information, retired at the end of the fiscal year, after 41 years of service. On the same date Miss Dorothea H. Born, also of Inf., retired after 30 years, as did Harry N. Foss of the Office of the Solicitor. We wish them good health, long life, pleasant memories.

Bigger egg, better taste?

Guy A. Peterson of FCA writes: "I wish to challenge the statement (in June 21 *USDA*) that the bigger the egg the better the taste. What a dish that would make the ostrich egg! I have checked grading reports of USDA and you nearly always find a higher percentage of low-grade eggs in grading large than in grading small or medium eggs. This is recognized by the Department in refusing to set up the AA classification for Jumbo eggs. One Ohio cooperative last year, in grading 30,506 cases of large eggs, had 18.7 percent classified as B, while only 6 percent of 8,030 cases of medium-sized eggs were so classified."

OFFC

The Department's Office for Food and Feed Conservation was terminated June 30, as no funds were provided by the Congress for its continuation. Since there is a continued need for conservation, the Department is interested in seeing that the current drive is maintained, at least until this year's corn crop is harvested. Tentative steps are being taken to see what phases of the work of the Office for Food and Feed Conservation can be taken over to some extent by regular agencies of the Department.

Nutrition history

Dr. John R. Murlin's lead article in the May issue of the *Journal of the American Dietetic Association*, "Historical Background for the Nutritional Treatment of Metabolic Diseases," is documented, definitive, and of great value in clarifying the concepts of different workers in this field since the earliest times.

Technical patents

There is a very thorough review of medical patents in the *Journal of the American Medical Association* for June 5 and, since medical patents bear close resemblance to other scientific patents, you may find it of value. It was prepared by Archie M. Palmer, D. C. L., for the National Research Council. It covers, among other things, the patent practices of a great number of universities, general university patent policies, generally accepted practices, and takes up more than 10 pages of this issue of the *Journal*, which our Library gets.

Prices?

You no doubt think they're high. British Information Services recently quoted a few prices in England which may give you solace. Pipe tobacco is in the neighborhood of a dollar an ounce; cigarettes run 72 cents for a pack of 20. During the first week of June potatoes were 12 cents a pound, but this should drop to 4 cents by July 13 when the short-season potatoes come in. Early field-grown peas were 42 cents a pound; green-house-grown peas were 72. Before the war, British fruits and vegetables were marketed according to a closely observed grading system. But that system vanished during the war when any kind of food at almost any price found a ready market.

FS flood aid

Forest Service aid during the flood in the Northwest was varied and widespread. Its departmental shop at Sellwood, Oreg., kept a crew of truck drivers and mechanics busy on a 24-hour schedule to assist the Army engineers, the Red Cross, and other public agencies. Agency truck-trailer transports and drivers, and numerous dump and stake trucks hauled stocks or bags used in building dikes. The FS warehouse at Spokane was operated on a round-the-clock basis issuing shovels, sleeping bags, mattresses, pumps, tents, radios and miscellaneous equipment. A service airplane dropped supplies to isolated families in the Chelan area. Throughout the flood area, FS personnel helped with the dike-building, evacuating families, housing refugees, and furnishing bedding, clothing, and food to relief stations. With the forest fire season in the Pacific Northwest just ahead, repair of damage estimated to be in the neighborhood of \$6,000,000 to bridges, telephone lines, firemen's cabins, campgrounds and roads in the national forest is imperative. Steps are already being taken toward getting these facilities back into service. An appropriation of \$1,000,000 for flood damage repair on the national forests was included in the second deficiency bill, approved June 25.

Farm loans

An amendment to Title I of the Bankhead-Jones Farm Tenant Act, recently approved, increases the interest rate allowable on insured mortgage loans from 2½ to 3 percent, and the interest on direct loans made by the Secretary for the acquisition and improvement of farms from 3½ to 4 percent. It also authorizes the use of the mortgage insurance fund heretofore established for the purchase of defaulted insured mortgages after they have been held by the lenders for a period of 7 years, as determined by the Secretary.

Insecticides and health

In the American Journal of Public Health for May, "Developments in the Use of the Newer Organic Insecticides of Public Health Importance" are reviewed by Justin M. Andrews and S. W. Simmons, of the U. S. Public Health Service. This is a definitive documented article discussing the insecticidal value and the toxicity of DDT, DDD, chlordane, benzene hexachloride, chlorinated camphene, piperine compounds, and pyrethrum.

In FCA

Carl Colvin has been appointed Deputy Governor of Farm Credit Administration, in charge of finance, accounts, and administrative services, to fill the office vacated by J. D. Lawrence, who has become President of the Columbia, S. C., Bank for Cooperatives. Mr. Colvin has been with the cooperative credit system since 1933, and before that was a teacher-trainer of University of Illinois. James M. Huston, who has been with the cooperative farm credit system since 1926, was appointed Deputy Land Bank Commissioner to fill the position vacated by Mr. Colvin. Mr. Huston received his bachelor's degree in agriculture at University of Missouri, in 1914.

Portias

At the invitation of the Bar Association of Tennessee, Virginia Merrills, Office of the Solicitor, spoke at its State convention in Chattanooga, June 17, on "Some Contributions of the REA Program to the Growth of the Law of Cooperatives." Her speech will be published in the Tennessee Law Review. . . . Georgina J. Bingert, also of Sol., has been named chairman of a District of Columbia committee studying uniform inheritance laws in all States, and affiliated with a Nation-wide committee on probate and trust laws, set up by the National Association of Women Lawyers.

Conservation field day

On August 18 it is anticipated that 25,000 Marylanders will attend Maryland's Conservation field day, when the 175-acre farm of a 53-year-old widow, within sight of Harper's Ferry, W. Va., will be transformed in a single day into a modern, streamlined soil conservation farm. Before the sun sets, men and machines will complete a conservation program which would ordinarily require from 4 to 5 years. Maybe some of you would like to become Marylanders for the day, and see how this magic face-lifting of the contours is managed by the modern soil cosmeticians.

Northup leaves

Fred Northrup, who has been Director of the Price Support and Foreign Supply Branch, PMA, and USDA's principal liaison with the Economic Cooperative Administration, was named Secretary-General of the International Emergency Food Committee of the Food and Agriculture Organization, and took office July 6. L. B. Taylor, who has been Assistant Director of the Price Support and Foreign Supply Branch, has been named Director.

Succession

An Executive order has recently clarified the succession of officers of the Department to act as Secretary in the absence of the Secretary and Under Secretary. The order of succession follows: Assistant Secretary, Administrator of REA, Governor of FCA, and Administrator of FHA who, as required by law, are officers appointed by the President with Senate confirmation.

Textiles

Those of you interested in "Applied Textiles, Raw Materials to Finished Fabrics," will want to know about the revised and enlarged fourth edition of the textbook by that name, published recently by Lifetime Editions, Inc., New York, price \$6. The authors are George E. Linton and Joseph J. Pizzuto, both well known in the textile industry. The book is well illustrated. Pictures of eight different types of sheep, in the wool section, were supplied by the Bureau of Animal Industry. The Department Library has a copy of the book.

Charles J. Galpin (1864-1947)

The June 1948 issue of Rural Sociology (vol. 12, No. 2) is essentially a memorial to Charles Josiah Galpin, the distinguished rural sociologist, who was the predecessor of Carl C. Taylor as head of the Division of Farm Population and Rural Life, Bureau of Agricultural Economics. As such he was, for 15 years, Dean of Rural Sociology for the whole country.

Percy Hicks

Percy Hicks who, for more than 25 years worked with George Rousseau, recently retired stockroom supervisor, Printing Section, Office of Information, is building up something of a record for employees of his classification by having lost 27 days of annual leave during the past 5 years. We'd like to publish some other records of unusually faithful service if you'll send them in.

Stenographers

USDA's item on "stenographer stringency" (issue of June 21) unfortunately did not produce the blistering onslaught anticipated. There was the usual—of course anonymous—missive asserting that whoever had this idea of replacing much stenography was a numbskull, but we are afraid to tell that to the high official who originally suggested the idea to us. The item naturally had nothing to do with those high-class secretaries who amount to executive assistants. But despite the weather, the heat generated by the item was only tepid. So sorry. We had hoped for a spontaneous conflagration.

Office convenience

Under the arresting title, "Nobody Ever Died for Dear Old Rutgers," county agent C. A. Thompson of New Jersey writes about office efficiency and convenience in the rejuvenated, remarkable, and very readable Extension Service Review for June-July. It is odd that we spend so much time in our offices and often take such a little interest in their appearance, convenience, and lighting, not to say the impression they make on visitors. Some of us cannot very well alter things; some can; for the latter Thompson has ideas. You will also find excellent articles in this issue of Extension Service Review on conservation, radio as a tool, good-will garden seed to Germany, the national 4-H camp, program planning, cotton-dress-workshop epidemic, and on recognizing the young folks. Give the Review a try; you'll probably learn something you didn't know you didn't know.

Write plainly

And, adds a field employee, use short words. He continued with a famous quotation: "In promulgating your esoteric cogitations, or in articulating your superficial sentimentalities and amicable philosophical or psychological communications, beware of platitudinous ponderosity. Let your conversational communications possess a clarified conciseness, compact comprehensiveness, coalescent consistency, and concatenated cogency." May we cry Amen, with a muffled roar?

Double petunias

It is estimated by Office of Foreign Agricultural Relations that Japan will harvest and have available for export in October about 10 pounds of double petunia seed, the first shipments since before the war. None will be sold in Japan. An ounce contains 280,000 seeds, and prices range from \$250 to \$300 an ounce. Japanese horticulturists have monopolized world production of these seed since developing the garden oddity around the turn of the century. Next year's anticipated harvest of 20 pounds would equal the pre-war export level.

Edler to Europe

George C. Edler, seed statistician of the Bureau of Agricultural Economics, has gone to Europe to conduct a survey of vegetable and field-crop seed production and the potential market. He has prepared USDA's seed-production estimates for the past 31 years. His investigation will follow the general pattern of surveys under the Research and Marketing Act. You will find more details in release No. 1401, if you care to write Press Service, USDA, and ask for it.

New publications

Circular No. 785 on Angora Rabbit Wool Production has appeared, prepared by Thora M. Platt Hardy and Ethel H. Dolnick of Bureau of Animal Industry and dated May. . . . If you are in Alaska and have potatoes, Alaska Experiment Station Circular No. 7, issued in May, on Potato Storage in Alaska's Matanuska Valley might be just your dish. . . . And an older new one, if you can say that, is Margaret M. Morris' (School Lunch Division, PMA) illustrated publication on Planning the School Lunchroom.

Straw fiber newsprint

Paper used in a recent press run of a Chicago newspaper contained 17 percent of straw fiber incorporated with wood pulp. USDA's Northern Regional Research Laboratory at Peoria, Ill., cooperated in the experiment with a new type of processing. While the newsprint thus made was said to equal the usual run of paper used in strength, finish and color, it adds somewhat to the cost involved. If supplies of wood pulp fall or grow more expensive, the straw process may prove valuable.

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1 SHARE THIS COPY

USDA

FOR AUGUST 16, 1948

Farm people and land

IN JANUARY of this year about 27,439,000 persons were living on farms—2,249,000 more than the wartime low of 1945, but still a tenth fewer than in April 1940, when the last census was taken. Three quarters of a million babies were born to farm families in 1947, the largest annual infant crop since 1925. High birth-rate and demobilization have been the main factors adding to farm population. But migration from farms last year prevented any net gain. The bulk of the 1940-47 decline was attributable to youths under 25. Considerably more farm residents are employed in nonagricultural industries now than in 1940.

Is now the time to buy farm land? A prominent economist once wrote that "of all the factors influencing the success or failure of a farmer, the biggest one was when he was born." Be that as it may, farm land values in the United States now average as high as in 1920, the peak of the World War I land boom. In more than half the States this boom peak is exceeded and values are the highest on record. Net rents for the next decade would have to stay as high as in 1946, and more than three times higher than the 1935-39 average, safely to justify current land values. Furthermore, after the next decade, net land incomes would have to be at the same level as for the 1910-47 average, which would include two periods of very high income. Want to bet? Better take a good long second look first.

British barley expert

There has been published in London Dr. E. S. Beaven's posthumous book, *Barley: Fifty Years of Observation and Experiment*. Barley was Beaven's life interest; he was the son of a barley grower and son-in-law of a maltster. All his life was spent handling and studying barley. Working often empirically he seemed by some intuitive process to know which of his many seedlings to reject and to retain. He became one of the outstanding barley experts of his generation.

A tree you milk

That is the great rubber tree of the Amazon Valley, *Hevea brasiliensis*. It was introduced in the Dutch East Indies 71 years ago, where it improved more rapidly in milk-giving properties than dairy cows have in the same period. USDA botanist, R. J. Siebert, says the first mature Hevea seedling trees grown in plantations located where the plant's common diseases and insect enemies were not, yielded only about 350 pounds of raw rubber (milk) per acre, but through selection and bud grafting that has now risen to an average of 1,500 pounds. The dairy-cow average has risen from about 3,500 to about 5,000 pounds of milk per year in the same period. Eastern strains of Hevea now planted in Latin American countries maintain these high yields. Resistant strains fend off disease. A new high-yield rubber industry appears to be developing.

How USDA got started

HERE, WITH THE original quaint punctuation and capitalization, is a recommendation President George Washington made in his eighth annual address to Congress, December 7, 1796:

It will not be doubted, that with reference either to individual, or National Welfare, Agriculture is of primary importance. In proportion as Nations advance in population, and other circumstances of maturity, this truth becomes more apparent; and renders the cultivation of the Soil more and more, an object of public patronage. Institutions for promoting it, grow up, supported by the public purse: and to what object can it be dedicated with greater propriety. Among the means which have been employed to this end, none have been attended with greater success than the establishment of Boards, composed of proper characters, charged with collecting and diffusing information, and enabled by premiums, and small pecuniary aids, to encourage and assist a spirit of discovery and improvement; by stimulating to enterprise and experiment, and by drawing to a common centre, the results everywhere of individual skill and observation; and spreading them thence over the whole Nation. Experience accordingly has shown, that they are very cheap Instruments, of immense National benefits.

An Act of July 4, 1836, became the basic authority of the Patent Office which, under Commissioner Henry L. Ellsworth, who took office that date, began to give some aid to farmers. A bill introduced in the House by Mr. Randolph, March 7, 1838, would have provided a clerk in the Patent Office, to be denominated "the agriculturist," at \$1,600 a year, to superintend the collection and distribution of seeds and plants and render related services. This bill failed of action.

Next, on January 22, 1839, Commissioner Ellsworth addressed a letter to Chairman Isaac Fletcher of the House Committee on Patents explaining, at Mr. Fletcher's request, the services the Patent Office was trying to render in the field of agriculture. On January 29 of that year Senator Strange, from the Committee on Patents and the Patent Office, reported a bill containing a provision "that a sum of money, not exceed-

Dr. Carver, fungus collector

AN IMPORTANT but little-known contribution by the late Dr. George Washington Carver was the fight against plant diseases he undertook as a student at Iowa State College, by collecting and studying many species of fungi known to be plant parasites. Joining with his instructor, Dr. L. H. Pammel, an outstanding botanist, Carver did much of the work in the preparation of an annotated list of fungi collected and studied at Iowa State, in 1895.

At Tuskegee, Dr. Carver continued collecting fungi as a hobby. Records show that he collected and annotated a list of more than 1,000 species in and around the institute campus. In 1935, Dr. Carver was appointed a collaborator of the then Bureau of Plant Industry. Between then and his death, in 1943, Dr. Carver collected the greatest number of his fungi species. Many of his specimens proved of significance in the fight against various plant diseases.

ing one thousand dollars, be, and the same is hereby, appropriated, out of the patent fund, to be expended by the Commissioner of Patents in the collection of agricultural statistics, and for other agricultural purposes * * * Representative Fletcher of Vermont reported an identical bill in the House on February 16, 1839. This legislation was approved by the President March 3, 1839, and constituted the first specific Federal appropriation for agricultural purposes.

In his report for the year 1839, dated January 1, 1840, Commissioner Ellsworth reported the expenditure of only \$120.40 of the \$1,000, largely because inquiries propounded by the Secretary of State in taking the census had provided so much useful data that the Patent Office had to procure very few agricultural statistics on its own. Agricultural work thus had its earliest beginnings.

How sure are you?

EVERY now and then we read something, accept it as part of our mental equipment, and thereafter proclaim its verity. But how sure are we? How sure are research workers of the results they publish?

In 1946, a group of such workers reported that thiamine supplementation of the diet of certain orphanage children improved their mental performance and visual acuity. Many accepted this work as final. Others did not. In 1947, another research group repeated the experiment, but with a great deal more care. For one thing the subjects of their study were 44 pairs of identical twins ranging from 7 to 15 years in age. Less than half of them had already been getting the recommended daily allowance of thiamine, a very few had gotten more, but about half had been receiving 20 to 40 percent less than this quantity.

During the tests the control group of children received placebos (an inactive medical preparation) and the experimental group received a supplement of 2 milligrams of thiamine each day. The children were retested after 136 and again after 273 days. At the end of the former period children who got the additional thiamine did appear to have increased faster in weight and in height, and to be slightly superior in manual dexterity and retentive memory. But at the end of the 273 days no appreciable differences whatever could be detected between the experimental and the control group, in these factors, or in reasoning, rote memory, code substitution, eyesight, intelligence, reading, and arithmetical tests.

Concluded Nutrition Reviews for June 1948: "Results of this apparently carefully planned and conducted study emphasize the dangers in drawing conclusions from short-term experiments of this nature conducted with genetically heterogeneous groups." The extreme care and caution of the second group of research workers paid off in dependable results. For even scientists can at times go off at half-cock.

Public lands

If interested in forest range policies and encroachment on the range, read "Who Gets Our Public Lands?" by Arthur H. Carhart in the July Atlantic Monthly. Carhart is an Iowan, and a graduate of Iowa State, who served on Forest Service's staff as a landscape architect and, in 1938, was asked by the Governor of Colorado to organize the Wildlife Restoration Program under the Pittman-Robertson Act. He knows his subject and he minces no words.

How to be a prophet

WE STAND in awe of Louis H. Bean. For so remote from the editorial mind are mathematics and statistics that they classify with haruspicy and other forms of necromancy, and are wholly esoteric, though duly hallowed. Therefore a man like Bean, who has thoroughly mastered statistics, is an object of high respect, however mysterious. Educated at Harvard and the University of Rochester, he entered Bureau of Agricultural Economics and tarried a decade, 1923-33. He then became economic adviser to the AAA. During World War II he was assistant to the Director, Board of Economic Warfare, and thereafter, Chief Fiscal Analyst, Fiscal Division, Bureau of the Budget. He is now back in the Office of the Secretary.

He has just produced a simple and graphic book which will help anyone (even statistical illiterates like this editor) become his own election forecaster. The book is entitled "How to Predict Elections"; Alfred A. Knopf published it, and bookstores will part with it for \$2.50 a copy. It is devoid of politics, in the invidious sense, and will give you no gossip details about candidates or personalities. Although author Bean chastely quotes Hamlet, Act II, Scene ii: "Though this be madness, yet there is method in't," before he begins, the book itself is not mad at all. Indeed it proves rather fascinating.

No results of this particular election are predicted. Instead the book covers the wide range of forces which affect election results. It is full of information on American idiosyncrasies and voting habits. Basic to the analysis is discussion of the great political tides which ebb and flow throughout the electorate. We advise you to look up this scientific method for forecasting election trends, so that you may become an accurate prophet yourself. The language is not baffling, neither are the charts or tables the least bit offensive.

An assist to Italy

Glenn R. Riddell of Soil Conservation Service has gone to Italy to aid in setting up a soil and water conservation program there. He has a year's leave of absence and will be with FAO during that time. During his two World War II years in Italy, he was regional agricultural officer for the military government, and had approximately a third of the Italian provinces under his supervision at one time or another. Italy has in the past carried on some land development, irrigation, drainage, and reforestation work, but had to use its soil much too intensively during the war. The program in which Riddell will participate combines education, research, and actual soil and water work on widely scattered farms.

Brief but important

WORLD WAR II MEMORIAL

Where are your letters to Director Reid of Personnel on the kind of World War II Memorial you favor? See page 1, June 21, *USDA*. Mr. Reid would still like to hear from you in the field especially.

Remaking a farm

If you want to know how soil-conservation experts remodel a farm in a single day, read the first article in Soil Conservation for August—"Record Crowd Sees Birth of a New Farm," by Barrington King. You will also find much of interest in Hugh Bennett's article, "Wasteful Habits," in the same issue. Wellington Brink of Soil Conservation Service edits this always stimulating and instructive monthly.

Varnish from the sugar bowl

The American Journal of Pharmacy for April contains an article on work done at Eastern Regional Research Laboratory. It is called "Sugar-Coating the Furniture for Better Wear." The editor of *USDA* has a very few stapled separates of this article. It tells how they make coatings for wood and metal out of starch and sugar—ordinary table sugar.

Rabbits and moldy hay

Our workers at the Rabbit Experiment Station, Fontana, Calif., have proved that feeding moldy hay does not injure rabbits. They do not recommend moldy hay, as mold growth destroys food value, but such hay, definitely does not endanger rabbits.

Electric smokehouse

Certain Virginia co-ops now smoke hams electrically, thanks to REA. The "smokehouse" is a room in a modern fireproof building and the smoke is produced by spreading hickory sawdust over an electric grid, fitted into a container quite like an ashbox of an old-fashioned kitchen range. This method of smoking meat imparts uniform flavor and saves time. Great is science!

Timber harvest

Speaking before the Seventh Annual Conference on Conservation, Nutrition, and Health, Dr. Benson H. Paul, of the U. S. Forest Products Laboratory, said that we shall have to harvest our trees in the future at a much younger age than hitherto. All our high-quality timber of the past has been derived largely from the outer 200 years' growth of trees from 300 to 400 years old. But future lumber will have to be produced in stands less than 100 years old. Already, however, genetic research is pointing the way to faster-growing timber trees.

Kellogg returns

Dr. Charles E. Kellogg, Chief, Division of Soil Survey, Bureau of Plant Industry, Soils and Agricultural Engineering, returned in July from England where he attended the Commonwealth Conference on Tropical Soils and visited experimental work in southern England as a guest of the British Government.

John H. Jenkins

Mr. Jenkins, brother of Representative Jenkins of Ohio, and formerly Assistant Director of Resettlement Administration and Farm Security Administration, recently died in Denver at the age of 77. He went to Colorado in 1900, to become a sugar merchant. He organized the first Chamber of Commerce in Pueblo, was a member of the Colorado River Board under President Hoover, and was the State's immigration commissioner for many years.

Hearing examiners

Effective July 1, the Office of Hearing Examiners was transferred from the Office of the Solicitor to the Office of the Secretary.

New division in Extension

With departmental approval the expanded Economic Section of the Extension Service has become the Division of Agricultural Economics, with H. M. Dixon as Chief.

Wells resigns

J. E. Wells, Cooperative Bank Commissioner of Farm Credit Administration since last year, has resigned to become General Manager of the Farmers Union Livestock Association. Robert L. Farrington, Deputy Governor of FCA, was designated Acting Cooperative Bank Commissioner while retaining his other title also.

Missouri Basin plan

Secretary's Memorandum No. 1220, July 9, announced that the Department will prepare a multiple-purpose agricultural plan for the Missouri River Basin. For more detail procure the memorandum from Secretary's Records Section, P&O, Room 134-W, Ext. 3337.

Tobacco inspector assignments

The policy relative to assignment of inspectors to tobacco auction markets and sales during the marketing season for the 1948 crop of flue-cured tobacco was announced July 14. You will find details in No. 1473; write Press Service for it.

Compressed foods

Miscellaneous Publication 647 has appeared recently on the "Experimental Compression of Dehydrated Foods." It reports cooperative work by three scientific bureaus of Agricultural Research Administration, and the Grain Branch of Production and Marketing Administration.

Poultry improvement

Those interested in the recent meeting of the National Poultry Improvement Plan Conference in St. Louis, will find details in No. 1472, for which write Press Service, Office of Information, USDA. Brief accounts are given of changes made in provisions of the plan; for more detail still, write the Bureau of Animal Industry.

Potatoes

Idle factory equipment is being put to work to make flour for hungry Europeans from our surplus potatoes. This is one phase of Production and Marketing Administration's over-all program to promote wider uses for surplus potatoes, particularly in human consumption. For details write Press Service, Office of Information, USDA, and ask for No. 1467.

Grass

As you no doubt know by now, the new Yearbook has appeared. It is entitled "Grass" and it covers the subject completely. According to Alfred H. Sinks, in Country Gentleman for August, which broke out into color-illustrated ecstasy over the book, "It's all there; the theory and the practice," and Yearbook Editor Alfred Stefferud has achieved another best seller. There are 1,500 species of grass to write about, which may be more than you care to read about—but then there are thousands of subspecies, varieties, and strains. What is your grass problem? Here is the answer. And how do you get the book? Bless you, if you haven't a copy in hand now, you'll probably have to pelt the Superintendent of Documents, Government Printing Office, with a first-grade \$2 bill to get your copy. But the book itself has color photographs, too; it's more than worth the money.

REA

The lead article in June American Political Science Review is "The Early Days of the Rural Electrification Idea, 1914-36," and is by Morris L. Cooke, REA's first Administrator.

Mildew mastery

If you want to minimize the mildew you will find useful the new publication from Bureau of Human Nutrition and Home Economics on Home Methods of Preventing and Removing Mildew (AIS-72). The subject matter is by Margaret S. Furry.

European recovery liaison officer

Secretary's Memorandum No. 1211, Revision 1, July 15, announced the appointment of L. B. Taylor, Director of Price Support and Supply Branch, PMA, as Chief Liaison Officer between USDA and other Government agencies in all matters concerning the European Recovery Program.

Using carotene-rich forages

Feeding a supplement of well-cured, leafy green legume hay in a ration where low-carotene roughages like cereal hay, straw, or corn stover are used, is recommended by Bureau of Animal Industry workers as a method of preventing anasarca and of other symptoms of vitamin A deficiency. You will find more details on this work on release No. 1422 for which write Press Service, Office of Information, USDA.

Fats, oils, oilseeds

Office of Foreign Agricultural Relations has announced that Howard A. Akers, a marketing specialist in the Fats and Oils Branch of PMA, is visiting parts of western Europe and Africa to study conditions abroad affecting foreign markets for our present or potential exportable supplies of fats, oils, and oilseeds. This is a Research and Marketing Act project about which you will find more details in release No. 1409, for which write Press Service, Office of Information, USDA.

Reading

You do not have to read slowly to read attentively. You can train yourself to read very rapidly, yet to miss nothing of importance to you. Thomas Babington Macaulay read books as fast as ordinary people could scan them and scanned them as rapidly as anyone could turn the pages. Yet he knew what was in them; he retained and could reproduce the information.

Information you may want

If you want any of the following write to Press Service, Office of Information, USDA, and ask for them by number: European Crop Outlook Continues Favorable, abstracting the general situation, No. 1487; the fall pig increase requested by Secretary Brannan, based on good feed prospects, strong demand for meats, and continued price supports, No. 1497; the details about the Long-Range Multiple-Purpose Agricultural Program for the Missouri Basin, No. 1504; the report of M. L. Wilson, Director of Extension, on how agricultural education aids Greek rehabilitation, No. 1508.

Stark leaves administrative post

Paul C. Stark has resigned as Director of the Food Distribution Programs Branch, PMA, to become Consultant on Food Distribution. He entered Government service in May 1945 as Director of the Office of Home Food Supply, WFA, and became Director of the FDP Branch in March 1946. A Missouri native, he has for many years engaged in fruit production and variety research. He was educated at Cornell, and is former associate editor of the American Fruit Growers Magazine. H. C. Albin, Associate Director of the Food Distribution Programs Branch, now serves as Acting Director.

Top officials

Every few weeks there appears a revised mimeographed list of the top officials of the Department of Agriculture. Write the Secretary of the Administrative Council, or call Ext. 3321 to get copies.

Radioactive isotopes

For the small sum of \$1 you can procure the lithographed, 175-page, proceedings of the Auburn Conference on the Use of Radioactive Isotopes in Agriculture, held December 18-20, 1947; address Alabama Polytechnic Institute, Auburn, Ala.

Tagged chemicals

The Atomic Energy Commission, Washington 25, D. C., recently issued a program for the production and distribution of tagged chemicals. You can procure the press release by writing the Commission; those interested in obtaining these or other labeled materials should address inquiries to Isotopes Division, Atomic Energy Commission, P. O. Box E, Oak Ridge, Tenn.

Miscellany

Two Miscellaneous Publications of the USDA attract our attention, one recent, one not so recent. No. 597, Planning Your Farmstead Wiring and Lighting, appeared in April 1946, but is still an excellent compendium on the subject, well illustrated, well written, from REA. No. 645, dated June 1948, is a comprehensive Directory of Activities of the Bureau of Plant Industry, Soils, and Agricultural Engineering, 1947; it covers the bureau headquarters and all field installations, foreign and domestic.

Angus to Mrs. Clay

Writing in the North Dakota Union Farmer, Angus McDonald recently said: "A little group of 40 people who work in the inquiries section of the Office of Information are worth 1,000 times what they cost you in taxes. It is this little group that acts on thousands of requests (for information) that reach the Department from all parts of the country. Mrs. Eleanor Clay, who supervises the information desk in the Administration Building, told me that about 3,000 written requests and 238 telephone calls came in on June 1, which, she says, is a little below average."

Timber and cotton

Business Week for July 10 contains an illustrated article entitled "Industry Pushes Reforestation to Assure Future Timber Supply." Some of this program is carried on in close cooperation with Forest Service. The same issue of the same journal pictures a cotton picker doing the work of 30 field hands. One planter is quoted as having mechanically picked, at \$4.50 a bale, his 1947 crop which it would have cost \$45 a bale to hand-pick—though, of course, mechanically picked cotton is a half to a full grade behind hand-picked. Even then the saving is enormous. Further pictures detail the construction and operation of this machine.

Tell-tale red dots

Female grain weevils gnaw small holes in the surface of the kernels, deposit their eggs, and then coyly plug the hole with a jellylike material which, when hardened, seals the puncture so that the grain superficially appears perfect. Only experts can detect the infestation. Now J. C. Frankenfeld, USDA entomologist, working on a Research and Marketing Act project, has discovered that little cherry-red dots appear where weevils have laid their eggs if grain kernels are soaked a few minutes in a stain containing acid fuchsin, and are then washed. These dots are not present on weevil-free grain. For more detail on this test and on how to fumigate to avoid grain loss from insects write Press Service, USDA, and ask for No. 1407, or EPQ and request ET-256.

Farm newspaper

"Farmer Takes a Newspaper," by Ruth Moore, is a delightful account of John Gould's Libson (Maine) Enterprise. It appeared in the Saturday Review of Literature for July 3, 1948 (address is 25 West Forty-fifth Street, New York City 19, or the Library could probably loan you a copy.) It demonstrates by example the kind of small-town newspaper writing John Gould does to increase interest in the circulation of his small-town weekly. Key device used is, as someone said to John, "Your items are so local they're universal." If you have a desire to know how to write so as to make friends of and influence farm people look up this article.

The King's gobbledygook

If you can in any way get hold of the New York Times Magazine for July 11, 1948, by all means read the article by this title, telling how "with 'bottlenecks in bottles,' British officialdom has got out of hand and Government has initiated an undertaking." The article is by Mervyn Jones, and it discusses the British version of gobbledygook. But the unhappy American veteran is mentioned who was told "the noncompensable evaluation heretofore assigned to you for your service-connected disability is confirmed and continued," also the child who wrote that the cow had a head "so that the mouth may be somewhere," instead of saying "in order to ensure that the oral cavity may be appropriately positioned environmentally." But borrow, buy, beg, or—requisition the article and read it for yourself.

Dr. Beeson promoted

Dr. Kenneth C. Beeson has succeeded Dr. Karl C. Hamner as Director of ARA's U. S. Plant, Soil, and Nutrition Laboratory, Ithaca, N. Y. The latter resigned to head the Department of Botany at University of California, Los Angeles. Dr. Beeson is a native of Iowa, who received his bachelor's and master's degrees at University of Iowa, and took his Ph. D. in soil chemistry at Cornell in February 1948. In the Department for 18 years, he has been engaged in research related to soils. He joined the Laboratory staff in 1940, and has devoted much time to study of mineral deficiencies in plants and animals, as an outgrowth of which areas where cobalt is lacking in animal feed were found. For more than a century cattle and sheep troubles caused by this deficiency had puzzled scientists; now small amounts of cobalt salts mixed with the feed restore the animals to health.

"Word wisdom"

We had anticipated that several SCS employees would by this time have condemned the "slander" on the word "conservation" contained in the article of this title in *USDA* for July 5. But none has. Now, however, a Georgia Forest Service employee declares that there is no more beautiful word in the language than "conservation." It is neither "sterile" nor "swivel-chair." "Conservation of the soil" or "Holy conservation of the soil" are musical phrases, as fine as Poe's "Tintinnabulation of the bells." Says he: "Whether I see it written or hear it spoken, I see rolling country covered alternately with dense forest of beautiful trees and green, luscious pastures, with clear streams meandering through all. I can hear the gentle music of the wind in the tall tree tops; I can see the cattle, replete with the morning's grazing, going to the shade of the giant spreading white oak at the fence corner; I can hear the joyous gurgie of the stream as it goes, gently and happily, back to its mother the sea." Now what's the matter with you SCS people who refuse to defend your noble word "conservation" from its traducers?

Agricultural legislation

A Digest of Agricultural Legislation Enacted During the Eightieth Congress has been prepared by the Division of Legislative Reports, B&F, Room 113A, Ext. 4654. In it you will find both public and private laws, as well as bills vetoed and resolutions, listed and indexed.

Stubble-mulch farming

This is the subject of new Farmers' Bulletin No. 1997 issued in June. Its full title is "Stubble-Mulch Farming to Hold Soil and Water." Its authors are F. L. Duley of SCS and J. C. Russell of University of Nebraska.

Stretcher Wilson

When M. L. Wilson, Director of Extension, arrived in Greece, it turned out that his title could not be exactly translated into the Greek language, so they did the best they could by announcing him as the Director of the Agricultural Stretching Service. We think that was about right after all, for if any organization can stretch agricultural knowledge so as to give farmers the last elastic inch of assistance it is the Extension Service.

Those seed from Bikini

You may remember that our Plant Industry Station at Beltsville sent some packets of seed to Bikini for exposure to atomic radiation. The seed had their adventures just as did the goats, pigs, and other live animals. Seed of a single-cross hybrid corn and of an inbred sweet corn were exposed. Similar lots were also exposed to X-rays; these seed produced the expected abnormalities. Unexposed seed germinated and grew normally. Plants grown from the seed that had been exposed to the bomb rays exhibited much the same abnormalities and defects as those exposed to X-rays. Leaves were twisted, crinkled, dwarfed, spotted, or streaked; some apparently normal leaves lacked chlorophyll; some of the plants had dead areas. Microscopic examination showed that some of the chromosomes were injured.

In FAR

Duncan Wall who, for the past 2½ years, headed information in the Office of Foreign Agricultural Relations, as well as acted as special assistant to the Director, has left to become Director of Information for the Food and Agriculture Organization of the United Nations. James A. Howard, after 2 years in the Office of Information, succeeded Wall. Before entering Inf., Jim had been in the Pacific 2 years, at the urgent invitation of the Army and, prior to that, had worked in Bureau of Agricultural Economics and taught International Relations at Duke. Wall was at one time Assistant Director of Information and has a long background of agricultural service.

Leon B. Taylor

Mr. Taylor, a native of Kansas, reared on an Idaho farm, who graduated in agriculture from the University of Idaho, has succeeded Frederic B. Northrup as Director of the Price Support and Foreign Supply Branch of PMA. Mr. Northrup is now Secretary-General of the International Emergency Food Committee of FAO. Mr. Taylor joined the staff of the cooperative agricultural extension service in Idaho in 1925, and spent 13 years as club agent, county agent, and livestock and poultry specialist. From 1939 until 1941 he directed the Idaho AAA sugar program; the next year he was a member of the State's AAA Committee and in 1942 entered AAA in Washington. He became Chief of War Food Administration's Farm Machinery and Supplies Branch, and later held the same position in PMA, becoming assistant head of the Price Support and Foreign Supply Branch in the summer of 1947.

Brigham memorial

The sundial—for which friends of the late Reuben Brigham contributed—has been installed at his home, Glyndon, in Maryland; it, with various plantings contributed by friends, and a bronze plaque erected by the family, constitute the Reuben Brigham Memorial. The plaque carries the poem, *The Knight's Vigil*, which Reuben displayed in his office.

Farmer with radar

The New York Herald Tribune recently pictured an Illinois farmer who cultivates 5,000 acres of hybrid corn, in addition to other acres of small grains and hay, with the aid of radar to tell him when some clouds are coming up and how soon they may be expected to arrive. He also has an airplane ready to go aloft to seed the clouds with frozen carbon dioxide and try to get himself some rain. What would Mr. Jefferson of Monticello have thought of this?

Director Crocheron

The sudden death, July 8, of Extension Director B. H. Crocheron of California, was a special shock. One meeting with this highly individualistic man fixed him firmly in mind forever. An independent thinker who boldly voiced his views even when in a minority, he was fabulously industrious and he left a permanent mark on the agricultural development of his State. He became an agent of the Office of Farm Management, Bureau of Plant Industry, July 1, 1913. On March 1, 1919, he was made Associate Director of Extension for California, after having been State leader of county-agent and 4-H Club work for some years, and he became Director, July 1, 1919. Born in Jersey City, May 21, 1882, he was educated at Cornell and then became principal of Sparks Agricultural High School in Baltimore County, Md., serving until 1913. An outstanding and unusual man, he will be sorely missed.

Reprise on stenography

"It's about time someone spoke up about the antiquated practice of dictation, as did June 21 *USDA*," writes a field administrative worker. "Though by now it is a rock-ribbed convention to dictate letters to a stenographer, I can't think of anything more time-wasting and less effective," he continues. A word or two produces a letter from a capable stenographer anyway, but writing letters out in longhand for typists to copy has been found simple, time-saving, foolproof, and productive of good letters, says this administrator. The requirements are legible handwriting, a sharp pencil, and none of this "Cross that out . . . How does that read again? . . . Read that back" business. The girl does not misread her hieroglyphics, the letter does not have to be redone, no tempers are lost, time is saved. Says this correspondent: "Incidentally, I think dictation is exploited by men with an 'executive' complex, and it probably compensates for the common male resentment to feminine dictation by permitting men to 'dictate' to 'women.'" Well now what do you think? Don't be afraid to sign your name. Freedom of opinion rules here.

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Correspondence should be addressed to T. Swann Harding, Editor of *USDA*, Office of Information, Department of Agriculture, Washington 25, D. C. *Washington or field employees, please write instead of phoning.*

1 SHARE THIS COPY

USDA

FOR AUGUST 30, 1948

SCS migrants

SOIL CONSERVATION SERVICE men have been in demand for consultation and work in Europe this summer. Thomas B. Chambers, Chief of the Engineering Division, returned July 16 from Rotterdam, where he attended the Second International Conference on Soil Mechanics. Six hundred delegates from 38 countries made up the conference. SCS engineers use soil mechanics for determining the erodibility of soils where earth structures are needed for erosion control and water disposal. While in Holland, Mr. Chambers visited the Zuyder Zee area to see how the Dutch were getting along with unflooding the fine farm land they turned the water on during the war to balk the invading German army. He found great sections already reclaimed, excellent crops growing, and an interesting land-capability system by which farmers fit their crops to the water table.

Wilton T. "Terry" White is the second SCS man to go to Italy to help the Italian government organize a soil and water conservation program combining education, research, and actual conservation work on farms. He and Glenn E. Riddell, who preceded White to Europe, are being borrowed from SCS by Food and Agriculture Organization for the Italy job. Riddell, extension soil conservationist, SCS, for a number of years, will be in Italy until June 1949. Mr. White, Chief of the Range Management Division in SCS's Pacific Coast Region, will stay through 1948.

Dr. George W. Musgrave, research specialist of SCS, sailed August 4 for Oslo, Norway, to present a report of American work on infiltration and soil permeability throughout the past 10 years, at the Eighth Assembly of the International Union of Geodesy and Geophysics August 19 to 28. Before he returns to Washington, Dr. Musgrave visits Cambridge University to study the soil physics work there, and the Rothamsted and Harpenden experiment stations. He also will visit two soil-permeability laboratories in Holland and have a look at the soil structure work now going on in connection with reclaiming the Zuyder Zee flooded land.

LAWS APPLICABLE TO AGRICULTURE

USDA Document No. 2, Abridged List of Federal Laws Applicable to Agriculture, has just been revised to include actions of the second regular session of the Eightieth Congress. Write in, if you wish a copy; ask for No. 2, dated September 1. If in a great hurry, phone Miss Arden, Extension 4649.

Asst. Adm. for Production Explorers

WILLIAM B. CRAWLEY has become Assistant PMA Administrator for Production, succeeding Dave Davidson, recently deceased. He will also serve as acting director of the Agricultural Conservation Programs Branch, carrying on the work formerly handled by Under Secretary Loveland. He will be responsible for directing the agricultural conservation and related programs which are administered through the elected farmer-committee system in all agricultural counties.

A native of Alabama, born 1893, Mr. Crawley has been actively farming all his life, and still owns and operates the land farmed by his father in Pike County, Ala. He first entered public service in 1933, as a member of the Pike County community AAA committee. He was appointed to the Alabama State AAA Committee in 1935, and became its chairman in 1938, which position he left to come to Washington. He has been president since its establishment in 1947, of the Georgia, Florida, and Alabama Peanut Association, and chairman of the Alabama USDA Council. He has also engaged in road construction and contracting. His permanent home is at Banks, Pike County, Ala.

AN EXPLORATION is under way in Radio Service to find out how best to use television in disseminating agricultural and consumer information. This is a Research and Marketing Act project, Title II, hence it will deal primarily with information designed to encourage more efficient distribution and greater consumption of farm products. Television networks and stations, State Extension Services, and other public and private agencies will cooperate. Directing the project is Kenneth M. Gapen, Assistant Director of Information for Radio and Television; Dana D. Reynolds is in charge of operations; Tom Noone, television information specialist, formerly with the National County Agent News Syndicate, will concentrate on research; and programming for research will be handled by Maynard Speece, formerly Chief of Radio Information, Extension Service, University of Minnesota.

Television is not, as many people believe, just a "new kind of radio." It is a very complicated and potentially powerful medium in its own right. Great skill is required to utilize this power. Gaining that skill rapidly is the objective of the new project. Techniques learned will be made available to local units of USDA agencies for guidance in starting television programs on local stations.

The primary objective is to determine the kinds of information and types of programs that will be feasible. Techniques will also be developed for gaining maximum impact for the messages sent out by television. Surveys of viewer reaction are contemplated, to check values of the various techniques, and of the medium itself. First studied will be programs designed for the general television audience. Later, when television facilities are available for rural areas, the experiments will be based on programs of direct service to farmers and all who help distribute farm products.

SEPTEMBER IS NATIONAL YOUTH MONTH!

CENTENNIAL CELEBRATION

As you are probably aware from other news sources, the Centennial Celebration of the American Association for the Advancement of Science takes place in Washington, D. C., September 13-17, its first meeting having occurred in Philadelphia, September 20-25, 100 years ago. Dr. Austin Clark, Smithsonian Institution, is in charge of publicity and can supply more detailed information to those who desire it. Many noted scientists will make public addresses on many outstandingly important topics.

Quiz program

THE DEPARTMENT continues to be the Mr. Anthony of many more Americans than you would think. Whereas about 40,000 queries were addressed to it during the first 10 months of 1889, the count is about 3,000 a day today, disregarding telephone calls and visits in person. And the queries—they would knock your hat off. Our people really have to know the answers on this perpetual quiz program, but none of them has yet won a radio, a washing machine, or a free vacation in the Belgian Congo or the Aleutians.

How would you like to try answering some of the following, all of which were sent to the Department in good faith: What does it look like inside a tank? Can you recommend a Lonely Hearts Club; three of us girls are interested? Can you send me your free pamphlets on personal grooming? Will you tell me whether the President should keep his hat on when placing a wreath on the grave of the Unknown Soldier? What was Little Eva's last name in the play, Uncle Tom's Cabin? Does angora wool grow after it is made into a sweater? How do I bury cats in the ground? What color eyes do sheep have? How can I get a divorce in Florida? How can I rid my house of squirrels? Do animals have spring fever? Can silk be made from codfish? Should veterans raise silk-worms? How many miles does a bee travel to make a pound of honey? Can you suggest a name for my new baby? Please refer this to the office that handles surplus beer.

Just the other day a woman university student wrote in asking that the Department prepare her theme papers, with notes and bibliographies, on sociology and psychology, and requesting its rates for such services. She gave a liberal choice of subjects and the length of the papers she wanted. Sometime ago this missive appeared: "Please help a poor girl who is losing her hair and is almost bald. I am very sad about this, because I am in business, and you know what cats other girls are." Some of the letters are long, detailed, highly personal, and shamelessly revealing. But the number and variety of inquiries addressed to the Department of Agriculture signify the public's faith in its omniscience. Professor Quiz has nothing on us, except valuable prizes for the right answers.

Food supplies—prices

Secretary Brannan's statement, August 4, before the Senate Committee on Banking and Currency, in regard to the President's proposed anti-inflation program, is No. 1582; write Press Service, USDA, for copies.

Popular publications

AS OF JUNE 30, 1948, our most popular publications were the following, the subject matter of the bulletin being given first and the number of copies distributed next: Home canning of fruits and vegetables, 7,383,208; the removal of stains from fabrics, 2,975,834; farm poultry raising, 1,718,834; roses for the home, 1,625,910; diseases of poultry, 1,402,000; killing, curing, and canning pork on the farm, 1,233,390; the farm home garden, 1,204,230; home-made jellies, jams, and preserves, 1,174,365; poultry houses, 1,154,114; growing annual flowering plants, 1,078,450; pork in preferred ways, 569,000; honey and some of its uses, 494,600; and an item on baffling the clothes moth, 435,000.

Women write most of the letters for farm families and send in most of the requests. Practically all of them are anxious to improve their surroundings, hence publications on all of the following subjects—many of which we cannot supply—excite their interest at all times: Making spare cash, recreation, handicrafts, the home fruit and vegetable garden, modernizing and beautifying the home and its grounds, raising flowers, good grooming, home sewing, health and safety, problems of farm women, food preservation, subsistence farming, pets, club work, educational pursuits, culture and self-improvement, budgeting and household management, labor-saving practices and devices. Those are the facts. You can do the interpreting.

Living earth

Soil is anything but lifeless. Bacteria, minute plants and tiny animals, fungi, molds, insects, roots of grasses, herbs, shrubs, and trees, and vertebrate animals live in the soil. A single particle of surface loam may contain 60 million bacteria. An acre of Maryland meadow supports 13,500,000 invertebrates at no greater depth than "a bird can easily scratch," says Edward H. Graham, Soil Conservation Service.

Sparhawk retires

William Norwood Sparhawk, internationally known authority on the world's forest resources, has retired from Forest Service. A native of New Hampshire, he graduated from Yale and also took his master's in forestry there. He entered FS in 1910, at Ogden, Utah, and worked in central Idaho also before coming to Washington, in 1916, to make a Nation-wide study of fire hazards and protection. He became an outstanding forest economist. His two-volume work, *Forest Resources of the World*, published with Raphael Zon in 1923, is a classic; notable also were many of his other reports and publications. He was a delegate to the International Forestry Conference in Rome, in 1926, and studied forestry conditions in Germany and other central European countries in 1935-36. During World War II he was adviser and consultant on foreign forestry to the War Department, and he has recently worked closely with the Food and Agriculture Organization and on the European Recovery Program.

FS occupational hazard

THAT NEWSPAPER account you may have seen about the 3-year-old daughter of Forest Service lookout man Pomranky being carried off and killed by a bear was essentially correct. It happened on the Marquette National Forest in Michigan's Upper Peninsula. First word of the tragedy was Mrs. Pomranky's frantic telephone report to Ranger Elliott at 2:30 p. m., July 7, of the bear seizing the child from the back steps of the lookout cabin. Elliott and Pomranky left immediately for the lookout tower. After a brief search in the nearby woods, Elliott left to secure more help and organize the search.

The cabin and lookout tower are on a narrow ridge. It is 30 feet from the back porch to the steep bank and woods from which the bear approached and to which it retreated. One of the child's shoes was found approximately 6½ chains from the cabin and a hunting dog was started from that point. The child's body was found 2½ chains beyond. One of the men was left to guard the body. The hunter and his dog took up the bear's trail. They had gone only a short distance when a shot was heard. The man on guard had shot the bear, which had returned to the body before the dog overtook him. This was approximately 4 p. m.

Working in isolated, wild-country areas is not without some hazards to FS men and their families, of course. But this is the first authenticated case of its kind. Old-timers in the area tell of other cases where children disappeared and bears were suspected, but there was no definite proof in these cases. FS wildlife men say that such action on the part of bear is most unusual.

Esther H. Johnson

Miss Johnson, wool specialist of Office of Foreign Agricultural Relations, recently retired, after nearly 30 years of Government service, first in the War Trade Board. Soon after World War I, Miss Johnson transferred to Bureau of Agricultural Economics to work on livestock and wool statistics, where her broad knowledge of languages stood her in good stead. She has been in FAR since 1918, and has devoted her full time to wool during recent years. Her recent publications include numerous articles in *Foreign Crops and Markets*, on various phases of the wool industry in foreign countries, and yearly summaries of world wool production, issued as *Foreign Agriculture Circulars*.

Farm wages on high

In late June farm wage rates hit a new high of 7 percent above a year ago. They averaged \$5.40 per day, without board, for the country as a whole, as compared with \$5.17 a year ago, and a July 1, 1935-39 average of \$1.53! The largest wage increases occurred in the North Central States, the smallest in the East South Central.

Brief but important

FICB's—correction, please!

Losses of the Federal Intermediate Credit Banks—see *USDA's* story on Farm Credit Administration, "Successful big bank," August 2 issue—have been *only one-fourteenth of 1 percent* of total loans and discounts made, *not* one-half of 1 percent as stated therein.

Negro 4-H Club Camp

The first 4-H Club Camp for colored 4-H boys and girls was held at Baton Rouge, August 24-31, as arranged by a committee of State extension directors headed by L. I. Jones, of Mississippi.

Farm credit

Using Credit to Farm, Circular E-31 from Farm Credit Administration, by James L. Robinson, FCA extension economist, is an up-to-date treatment of the subject and is recommended to your attention.

Farm implement report

July 27 the Federal Trade Commission issued a Report on the Manufacture and Distribution of Farm Implements, a mimeographed summary of which may be obtained by addressing its Director of Public Relations. Undoubtedly many of you would find this summary very revealing.

1949 ACP

The 1949 Agricultural Conservation program was announced on August 3, on a basis of a congressional authorization of \$262,500,000. You will find more detail in Press Release No. 1615, for which write Press Service.

Flood damage loan authority

Secretary's Memorandum No. 1171, Supplement 3, July 9, transferred to Farmers Home Administration the 1948 flood damage loan authority contained in Public Law 785 approved June 25, 1948.

Read this thriller

We recommend Harry W. Henderson's detective thriller entitled "Food Sleuths," in July Marketing Activities (PMA). You will also find in the same issue a digest of the new farm law, the Agricultural Act of 1948.

Antigobbledygook

You will find an excellent antidote for gobbledygook, bureaucratic language, or officialese in Sir Ernest Gower's little book, Plain Words, which can be procured for 70 cents from British Information Services, 30 Rockefeller Plaza, New York City 20.

Pig makes a hog of itself

"The hog is by far the most valuable farm animal for converting waste and byproducts of the farm into marketable products," says John H. Zeller, Bureau of Animal Industry.

Clean up!

Some agency heads are beseeching employees to help maintain and improve the appearance of the buildings they occupy by refraining from leaving papers around carelessly and marking and marring walls. May we hope that these requests will be heeded?

Personnel directory

Office of Personnel has just issued a new Directory of Personnel Offices and Officials Exercising Delegated Employment and Classification Authority, Washington and Field.

USDA: August 30, 1948

Ag extension in Greece and Britain

Some of you not in Extension Service may be interested in Director M. L. Wilson's report to his own staff on his recently completed European assignment, and about agricultural extension work in Greece, Britain, Italy, and France. If so, write Division of Extension Information, Extension Service, and ask for it.

War alcohol

Research Achievement Sheet No. 93 (C), available from Agricultural Research Administration, tells about the successful wartime project of making alcohol for the manufacture of munitions and rubber, using wheat as the source because supplies of corn and molasses were critically short.

Bovine tuberculosis

The British repeatedly comment in admiration on the Bureau of Animal Industry's successful bovine tuberculosis eradication program. Latest seen: E. R. Boland, Dean of Medical and Dental Schools, Guy's Hospital, in two lectures delivered at the Royal College of Surgeons in London, November 18 and 20, 1947. The speaker in his second lecture introduced charts showing the extent of bovine tuberculosis in the United States in 1924, 1932, and 1938, the last being the latest chart used. He spoke of the achievement of BAI as in every way remarkable. (See British Medical Journal for July 3, 1948.)

Native foods

Native Foods of the Western Hemisphere is an article about some of the plant foods native to this hemisphere, plus one animal food that really never came into proper style in North America, the guinea pig. You will find something about cassava, sweetpotatoes, pumpkin, peppers, lima beans, chocolate, yerba mate, cranberries, and certain nuts. The article appeared in the Journal of the American Dietetic Association for July. The editor of *USDA* has some reprints if you care to write for one.

Research achievement

Research Achievement Sheet No. 94 (C), recently issued, tells about work at the Northern Regional Research Laboratory in developing a new method for producing starch and sugars from whole wheat, similar to that used in the wet milling of corn. During the war, such corn millers as used it when corn was scarce, made approximately 3 million bushels of wheat into glucose sirup. The process is economically feasible in the Pacific Northwest when the price of soft white wheat is low and freight rates on starch, glucose sirup, and dextrose sugar are high.

Howard to Hilbert

Dr. Louis B. Howard has resigned as Chief of the Bureau of Agricultural and Industrial Chemistry, to head the recently formed Department of Food Technology at University of Illinois College of Agriculture. He is succeeded by Dr. G. E. Hilbert, Director of the Northern Regional Research Laboratory since January 1946. Dr. Howard is a native of Illinois, educated at Purdue and the University of Chicago, who entered USDA in 1930, and worked mostly with AIC. He has served both at the Northern and the Western Regional Research Laboratories, and became Chief of AIC April 1, 1946. Dr. Hilbert is a native of Massachusetts, educated at Rensselaer Polytechnic, Lafayette College, and Yale, who taught at Yale 1925-23, and also entered USDA in 1930. He became scientific adviser to the Chief of the chemistry bureau in 1938, and helped correlate and coordinate the programs of the regional laboratories. He headed the Starch and Dextrose Division of the Northern Lab from 1940 until he became its Director.

Tator retires

S. W. Tator, Director of the Dairy Branch, PMA, since 1946, who has been on extended leave of absence because of his health, has retired. Before he occupied this post Mr. Tator spent 13 years as Federal Milk Administrator for Boston and New England areas, and he was at one time on the faculty of University of Pennsylvania.

Career service

Former Under Secretary Paul H. Appleby, now Dean, Maxwell Graduate School of Citizenship and Public Affairs, Syracuse, has a thought-provoking article entitled, "A Reappraisal of Federal Employment as a Career" in Spring 1948, Journal of the American Society for Public Administration, available from the Library. He deals especially with current poor morale, factors causing it, and its possible betterment.

Farm output

According to recent figures the national acreage planted to 52 main crops was 338 million in 1942, and the average production of food was 25 and the total farm output was 24 percent above the 1935-39 period. The respective figures for later years follow: 1943—347 million acres, 33 and 26 percent increases; 1944—351 million and 38 and 36 percent; 1945—357 million and 38 and 33 percent; 1946—355 million and 39 and 36 percent; 1947—358 million acres and increases of 41 percent for food and 34 for total farm output.

Young farmers in Britain

The six American young farmers recently arrived in England to study British young farmers' movements. They were welcomed by Lord Lt. Briscoe, President of the Cambridge Federation of Young Farmers' Clubs, who said, in part: "You will find we are a kind people. Although we may not appear to show it, we are an extremely grateful people, and particularly to you from the United States for all you have done for us during the war, for your support in arms and in goods and above all for your fellow feeling for us in our great difficulties."

Dr. John Marcus Evvard

The death of Dr. Evvard, nutritionist, agriculturist, research scientist, and author, was announced recently from Phoenix, Ariz., at the age of 63. A native of Illinois, he attended the Universities of Illinois, Missouri, and Arizona, and was at various times associated with Missouri Agricultural Experiment Station, Iowa State, and Arizona State. He also served with the United States Food Administration in 1917-18, and in the Office of the Secretary, USDA, 1922-23. He was the author of more than 700 bulletins and papers, mainly on nutrition and animal feeding. In recent years he had been a consultant on animal nutrition and production.

John Leslie Shriver

SCS field service mourns the death of Jack Shriver, kindly, considerate, unselfish, who spoke softly, rarely critically, and with a fine sense of humor. A West Virginia native who attended the West Virginia and Ohio State, he served as a county agent, then became a pioneer with SCS on the Salt Creek Project at Zanesville, Ohio. He later served as project manager at Hamilton, then technician in Dayton and Milwaukee. From January 1946 until his death, June 27, 1948, he was District Conservationist at Columbus, where he asked to go when his weakened heart compelled him to give up the more rigorous zone conservationist's job. He was a war casualty, and died from a war-caused heart ailment. He had rare understanding and love of nature, and a unique capacity for friendship.

The Loyalty Board of USDA has designated Mr. C. T. Forster of the Office of Personnel as its Executive Secretary. If you have a question about the workings of the program, or if you want information regarding the procedure in connection with it, get in touch with Mr. Forster—Room 408 W. Administration Building; Extension 2891; field employees write in.

Acres, Men, and Nutrition

Not long since Dr. Frederick J. Stare of Harvard Nutrition Laboratories called attention to the fact that, whereas 0.15 acre will produce a million calories in the form of sugar, and 0.44 acre in the form of potatoes, it takes 17 acres to produce a million calories in the form of beef. This statement led the New England Journal of Medicine for July 15, to run an editorial bearing the same title as this paragraph, which you will find amusing, entertaining, and somewhat thought-provoking as well.

Rutin

The rutin project initiated at Eastern Regional Research Laboratory by James F. Couch and associates has cost approximately \$300,000. But it is expected that 50,000 acres will eventually be required to produce buckwheat for rutin manufacture; from this acreage farmers should derive 2 million dollars annually. If it were all converted into leaf meal at \$250 a ton, dehydrators would receive more than 9 million, and the rutin produced from the dried plants would have a value of about 150 million dollars per year. But rutin's greatest value is in alleviating human suffering; this cannot be measured in monetary terms. For details on this project get Research Achievement Sheet No. 95 (C) from the Agricultural Research Administration, USDA, Washington 25, D. C.

Altitude cookery

The Colorado Agricultural Experiment Station has an Altitude Laboratory where cooking recipes are refashioned to succeed high above sea level. For, though your recipe may make a perfect light, even-textured cake at sea level, the cake falls in the center when made from the same recipe at 5,000 feet, and it begins to imitate a pancake at 10,000 feet. Says Dr. W. E. Pyke of the laboratory, the internal temperature of a baking cake is 18° F. lower at 10,000 feet than at sea level, and its structural strength derived from flour and eggs also decreases. The Altitude Laboratory has answered more than 50,000 individual requests on altitude baking problems, which first troubled pioneer families who settled in high-level regions of the United States in early days. Cooking on high is a special culinary science.

Farm production increases

Farm production per unit has increased greatly for certain products when the 1945-46 and 1925-29 periods are compared. Potatoes are up from 113.6 to 169.6 bushels per acre, or 49.3 percent; corn from 23.4 to 34.9 bushels, or 32.2 percent; and wheat from 13.5 to 17 bushels, or 26.8 percent. Tobacco yielded 1,124 pounds per acre for the later period as compared with 773.4 for the earlier, or a 45.5-percent increase, and cotton 242.2 pounds as compared with 171.1, a 41.6-percent increase. Hens now average 118 eggs each as compared with 93 in 1925-29, a 30-percent increase. The figures for pounds of butterfat per cow have risen from 174 to 192.7, or 10.7 percent, and for milk per cow from 4,437 to 4,844 pounds, or 9.2 percent. The preliminary August 1, 1948, forecasts are for average acre yields of 18 bushels for wheat, 189.2 for potatoes, and 41 for corn.

An employee was about to borrow \$1,000 to finance (in part) the purchase of a car. He first asked the dealer what the monthly payments would be, what the total interest would be, and how much the insurance would cost if he financed the \$1,000 with him over 18 months. The respective dealer figures were \$69 a month, \$104 total interest, and \$143 for insurance; the respective figures given by the Credit Union for the same loan, same period, were \$56, \$84, and \$69. Where did the employee borrow? Do you know about the Credit Unions—where you can deposit as well as borrow? If not, get in touch with the USDA CU in room 5433 S, Extension 5579, or the FCA CU in room 6867 S, Extension 2023. REA has a CU which serves its field people also.

Diet habits

A New York State survey carried on by Cornell School of Nutrition, the State Department of Health, and the Department of Nutrition of the Harvard School of Public Health disclosed that elementary school children have better food habits than secondary school children, though 30 percent of them get insufficient milk and protein, and half fail to get enough fruits and vegetables. Approximately 63 percent of adolescent girls and 40 percent of the boys were receiving poor diets; one-half the women, both in homes and in industry, had inadequate diets. Men in industry had better diets than the women and, while pregnant women had better diets than the nonpregnant, 75 percent of the former received diets that were in some ways nutritionally undesirable. The causes: Ignorance of basic nutrition facts and low income.

Food for multitudes

Says Sherman E. Johnson of the Bureau of Agricultural Economics, "By and large, and over a period of years, the desirable changes in the average diet are more milk, eggs, and meat, more fruits and more vegetables. But if necessary to conserve foods cheaper cuts of meat can be used and more cereals, potatoes, and breads, and we could make more use of skim milk powder in diets. If we made such changes, it is estimated that enough food for 25 to 30 million additional people could be provided for, compared with the 1946 consumption, and our average diet could still be adequate. A reasonably rigorous, sustained effort to reduce losses and wastes might provide food for several million people. On farms the harvests are often incomplete and spoilage and pests cause losses. Transportation, processing, wholesaling, and retailing each has its losses, and wastes of food occurs in many homes and public eating places."

Demand expands research

Rising demands of forest land owners for more information on growing timber and forest products are making changes in Forest Service research centers. Raymond F. Taylor, who has been in charge of the Division of Forest Management at the Northeastern Forest Experiment Station, Philadelphia, since June 1942, has been assigned to set up a research center at Juneau, Alaska. A native of Brooklyn, who attended the University of Washington and Yale, he entered the Rocky Mountain Forest Experiment Station, Fort Collins, Colo., in 1934. He is succeeded by Ivan H. Sims, who has been in charge of the Forest Research Center at Franklin, Va., since September 1915. A graduate of University of Michigan, who also did postgraduate work there, Mr. Sims joined the Appalachian Forest Experiment Station staff at Asheville, N. C., in 1927, was assigned to the Northeastern Forest Experiment Station territory, with headquarters at New Haven, in 1936-37, later served in the Washington office of FS and then took over at Franklin, Va.

Secretary's Memorandum 1221, July 22, announced the transfer to the USDA of the Remount Service, Department of the Army, as directed by Public Law 494, Eightieth Congress. Administration will be in Bureau of Animal Industry, and will be so carried on as to "advance the livestock and agricultural interests of the United States, including improvement in the breeding of horses suited to the needs of the United States."

Water-hyacinth fuel

The British have been producing methane experimentally from the water-hyacinth, a water pest of India as well as of certain parts of our own South. Under suitable conditions a single plant of this floating, bladder-supported water growth can multiply to cover 30 acres in 3 months, and 30 acres of water-hyacinth should be adequate to provide gas for a thousand families for 6 months. Eighty percent of the gas derived from its cellulose is methane, which burns clean and can be used as raw material in the manufacture of fuel and many other substances. As the British Information Service pithily puts it: "The green gas grows all around."

Small check

There have been people who regarded Government loan agencies as complicated instruments for sluicing good money down the hatch. In this connection, the Federal Farm Mortgage Corporation was established, in 1934, with the general idea that its 200 million dollars capital would probably all be required to stabilize our economy. No provision was made for its return to Treasury so, in early 1940, Farm Credit Administration requested Congress for authority to repay. Why? The corporation has repaid the original 200 millions, with the exception of an inappreciable \$10,000; it has a surplus of 83 millions, after paying operating expenses and absorbing all losses from its lending operations to date, and, on July 28, it drew a small check for 40 million dollars and turned it over to the U. S. Treasury as a dividend on the stock held by the Government. Refinancing farm indebtedness through this corporation has been a paying proposition. Borrowers paid back most of the money loaned before it was due; authority to make loans was not extended beyond July 1, 1947.

WRITE, DON'T PHONE

As repeatedly stated in *USDA*, we just are not geared to handle phone orders for materials we offer, nor even orders by special messenger. We lack the staff to offer such service. We therefore ask you please to send written orders. If, however, it is a matter of life and death to have one of our materials immediately, we have suggested you phone Miss Arden, Ext. 4649, or send your messenger to her room 535A. This is not sure-fire as she may be on leave, or working elsewhere. However, all written orders for our offerings are handled expeditiously and cheerfully.

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Correspondence should be addressed to T. Swann Harding, Editor of *USDA*, Office of Information, Department of Agriculture, Washington 25, D. C. Washington or field employees, please write instead of phoning.

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USDA

FOR SEPTEMBER 13, 1948

Bumper crop crisis

THE RECORD GRAIN production early forecast was expected to bring with it storage problems so serious that a campaign calling the attention of everyone to them has been underway for several weeks. As apparent total production of corn, oats, wheat, barley, and grain sorghums increased to 6,732,000,000 bushels, additional storage had to be constructed for several hundred million bushels more.

There wasn't time to build terminal storage or country elevators to provide the needed space. The only practicable place to store the grain was on the farm. Plans for bins and cribs that were cheap and could be put up quickly were worked out by engineers of the USDA and State colleges and distributed by ACP county committees and by county agents. Farmers who thought they would need additional storage were urged to get in their orders for materials to their dealers.

A farmer may want to borrow money on his grain. He may not have enough livestock to consume it. He may not want to sell at the price offered. If the storage he has or constructs meets the qualifications set up by the county ACP committee which administers the price-support loans in its own county, a price-support loan of 90 percent of parity can be obtained. Purchase agreements under which the farmer himself carries the risk of grain spoilage are also available.

Through a series of regional, State, county, and community meetings, information was carried to farmers in every area where storage was likely to be a problem. The information included copies of plans of bins and cribs that could be constructed quickly, and advice to the farmer about protecting his own interests and working with other farmers to protect their mutual interests in the orderly marketing of the grain crop.

In ARA

DR. P. V. CARDON again heads Agricultural Research Administration, with Dr. Byron T. Shaw as Deputy Administrator, and both are Utah natives! Born at Logan, Dr. Cardon was educated at Utah State and University of California. He has had nearly 40 years' experience in agricultural research. It includes 8 years in USDA dry-land agriculture investigations, a period as professor of agronomy and director of the Montana Seed Laboratory at Montana State, 3 years as farm economist at Utah Agricultural Experiment Station, and 7 as Director of that Station, during which period he also served as representative of Interior's Division of Subsistence Homesteads and regional director in six Southwestern States for AAA's Land Policy Section.

Dr. Cardon reentered Bureau of Plant Industry in 1935, became its Assistant Chief 1939-42, then was the first Assistant Administrator of ARA. He was Administrator of ARA, February 1945 until November 1946, when, because of temporary poor health, he became at his own request, Special Assistant to the Chief, Bureau of Plant Industry, Soils, and Agricultural Engineering. Space is lacking to review the entire wealth of Dr. Cardon's experience; if you want more details we suggest that you write Press Service, USDA, for No. 1717.

Dr. Shaw also graduated from Utah State, then took his doctor's degree at Ohio State. He worked briefly at California Agricultural Experiment Station, then returned to Ohio State as professor of soil physics. He took charge of soils physics research for USDA in 1943, and later directed investigations on soil management and irrigation. He has been Assistant Administrator of ARA for the past 18 months. For your information—ARA is the largest civilian research organization in the world.

Our Credit Unions

SOME 2,500 DEPARTMENT employees in Washington are their own bankers. Each is a member of one of the Department's three credit unions—Agricultural Employees' Credit Union, Farm Credit Administration Federal Credit Union, and the Rural Electrification Administration Federal Credit Union. Their total nest eggs amount to \$211,900: \$130,000 in the Agricultural Credit Union, \$49,000 in FCA, and \$32,900 in REA. June 30, 1948, the three had loans outstanding of \$122,300—\$75,000 in Agricultural Employees' Credit Union; \$18,500 in FCA; and \$28,800 in REA.

These CU's are cooperatives—owned and operated by the employees who use them. A member can buy shares—in other words, deposit money—he can borrow, or he can do both. But every member has to own at least one share. Management is invested in a board of directors and each CU maintains on office with a paid employee. At the end of the year dividends are credited to members on their share balances—after due provision for reserves. The share balances are used to make loans to members or are invested otherwise. It's simple to borrow from a CU and easy to pay back. It costs less, because interest is paid only on decreasing monthly balances. Loans are repaid in regular installments.

The purposes of loans include dentist and doctor bills, house repairs and furnishings, vacations, consolidation of store debts, purchases of automobiles, refrigerators, and television sets. Early this year, small loans were being made in larger numbers—folks just weren't able to keep up with the cost of living.

Rummaging into history, we find that the Agricultural Employee's CU was organized May 24, 1934; and the REA CU, May 6, 1936. The FCA has had a CU since 1934, but the present FCA CU was organized in 1942, when the FCA moved to Kansas City. Too bad for field employees, but though the REA CU includes its field folk, the Agriculture and the FCA CU serve only employees stationed in Washington. Just recently membership in the FCA CU was opened to Farmers Home Administration.

USDA'S HISTORY

No. 2 in the Agricultural History Series, issued by the Bureau of Agricultural Economics, is entitled "Some Landmarks in the History of the U. S. Department of Agriculture." First issued in 1940, it has recently been brought current to the day Secretary Brannan assumed office, June 2. Those who want copies may write either the editor of *USDA* or Economic Information, BAE.

Poor man's bank

MORE THAN 1,300,000 family-type farmers in the United States unable to obtain credit through normal channels have been assisted by Government programs to become more successful tenants or farm owners. These programs now carried on by the Farmers Home Administration were, prior to November 1946, administered by the Farm Security Administration and the Emergency Crop and Feed Loan Division of the Farm Credit Administration.

From 1935 through June 30, 1948, farm-operating loans totaling \$1,206,000,000 were made to 1,234,000 farmers to make adjustments in their farming operations and for the purchase of seed, feed, livestock, equipment, and other farm and home needs by the FSA and the FHA. From 1918 through October 1946, similar loans made by the Emergency Crop and Feed Division totaled \$576,000,000. From 1938 through June 30, credit to purchase, improve, develop or enlarge farms, totaling about \$345,000,000, was supplied about 60,000 farmers. From October 1947 through June 30, 1948, similar loans totaling almost \$2,500,000 were made by private lenders and insured by the FHA.

In addition to the total of \$2,130,000,000 for individual farmers' farm-operating and real-estate-purchase needs, loans were made in earlier years to groups of farmers in a total amount of \$32,000,000 for similar purposes. In 17 Western States funds are provided to install needed water facilities. These loans totaled almost \$8,500,000 by June 30, 1948.

Repayments on the farm-operating loans, including water facilities, were approximately 86 percent of maturities. On the farm-purchase loans, as of June 30, 1948, approximately 16 percent had repaid in full out of farm income, years ahead of schedule. Current borrowers, as of March 31, 1948, had paid over \$21,500,000 more than was scheduled on their loans.

From July 1, 1947, through June 30, 1948, the agency received almost 260,000 applications for farm-operating and purchase loans of which over 190,000 were for operating loans. Over 90,000 applications were considered for farm purchase loans. Of the total applications approximately half were from veterans. In the same period almost 117,800 farm-operating loans were made totaling \$64,845,000; direct and insured farm-purchase loans to about 2,500 families totaled approximately \$16,800,000; and 884 water

In August magazines

"CANNING UNDER PRESSURE," in This Week Magazine for August 8, tells homemakers how to can vegetables in a pressure saucepan, using the very popular directions worked out by Katherine Taube and Dr. V. Enid Sater of the Bureau of Human Nutrition and Home Economics. "It looks good, it tastes good, and it's good for you," says Seventeen, speaking (appropriately enough) of the tomato. This well-written piece calls attention textually and pictorially to new USDA tomato varieties.

Pic, The Magazine for Young Men, contains good advice for young men who may aspire to be dairy farmers. According to Pic's April 1948 job barometer, the average wage of hired farm workers in dairy regions was about \$100 a month with board, or \$140 without board. Would-be dairy farmers should write Bureau of Dairy Industry for further information, or contact their local county agricultural agent.

Fortune, in an illustrated article on "Ammonia as Fertilizer," tells about the deep South's new source of concentrated nitrogen, "and how cotton planters—and their plants—are eating it up." The Bureau of Plant Industry, Soils, and Agricultural Engineering supplied some facts for this piece. Those interested can get it in the Department Library.

Says Science Service, announcing publication of the new Yearbook of Agriculture: "Grasses, among the meekest of all the world's green folk, at last receive their meed of praise." They do indeed! And so does the Yearbook, in a number of recent reviews. For one of the most comprehensive, see "Bring Your Grassland Up to Date," in the August issue of Country Gentleman.



EASIER TYPING

Get YOUR copy of Easier Typing, a little publication issued by the Division of Training, Office of Personnel, as Administrative Series No. 1. It contains all sorts of helpful hints for typists, secretaries, and stenographers on the conservation of energy, time, tempers, and typewriters. It explains many typing shortcuts. Girls who have used the pamphlet have found it so helpful that they widely recommend it. Both Washington and field employees should ask their supervisor to get them a copy of this pamphlet unless they already have one.

facilities loans amounted to over \$1,500,000. Veterans now make up a large portion of the new borrowers from FHA, with over 80,000 assisted with farm-operating, water-facilities, and farm-purchase loans since July 1944.

Sanilac County plans

PLANNING THAT BEGAN about 10 years ago has paid dividends to residents of Sanilac County, Mich. Beginning modestly, Sanilac County Planning Committee has grown to include 20 active advisory groups equipped to render advice and assistance on such diverse subjects as drainage, rural health, schools, and the tourist and resort industry.

Assistant County Agent Gerhard F. Gettel is quick to point out that the success of the county planning committee is due in a large measure to the farm people of Sanilac County, who, through pooling their talents and resources, have found answers to many stubborn problems like weed control and fire prevention. The committee, however, does not stop with advice, but spearheads important programs by conducting demonstrations and fostering campaigns for better rural living.

For information on the effective Sanilac County Planning Committee, its organization, techniques, and accomplishments, write to Gerhard Gettel, Federal Building, Sandusky, Mich.

Brief but important

The ACP

We highly recommend a leaflet issued in June on the "Agricultural Conservation Program, Facts for ACP Committeemen," as containing facts we all should know. Production and Marketing Administration produced it; ask for PA-52.

Wild Rice

Our Journal of Agricultural Research for August 1 carried an interesting lead article on Wild Rice and Its Chemical Composition, by Ruth C. Capen and J. A. LeClerc, former employees of Bureau of Agricultural and Industrial Chemistry.

Business and the Americas

The Fourth Plenary Meeting of the Inter-American Council of Commerce and Production, the "Business Conference of the Twenty-Two American Nations," is being held in Chicago, September 12-22.

Lost leave

It is reliably reported to us that Ethan A. Norton, Washington office of SCS, during the 5-year period ended December 31, 1947, lost an average of 18 days leave annually; in 1947 alone, 25 days. Percy Hicks may now step aside; he doesn't lead the procession any more.

Lively co-op

The Crawford Electric Cooperative, Bourbon, Mo., sent Rural Electrification Administration a set of its promotional material about its August 20 annual membership meeting. This included a dodger announcing a \$25 prize for a fiddling contest, open to all, members and friends—and free plug tobacco to all contestants. We are not told whether any of the nectar named after the town was served.

Fair Employment Officer

Wesley McCune, Executive Assistant to the Secretary, has been designated Fair Employment Officer of USDA by Secretary's Memorandum No. 1223, August 13. Stanley Williams of the Office of the Secretary is alternate.

Value of derris root

Research Achievement Sheet No. 97 (O) gives all details regarding the new quick method of accurately estimating the insecticidal value of derris root, developed at the Federal Experiment Station in Puerto Rico.

Chickens like to eat

Maybe you already knew that, but were you aware that the winged variety with feathers consume 20 million tons of feed annually, and that would fill five solid box-car trains reaching from New York to Chicago? You take the check, please.

Farm revolution!

If you missed John dos Passos' fine illustrated article on Revolution on the Farm in Life for August 23, dig the issue up and look the story over. Seeds are hybrids, hired men are mechanics, the cattle eat corn cobs, and 1948 will almost certainly produce the greatest crop in history.

Mrs. Dabbs of BAE

Mrs. M. Ruth Dabbs, staff clerk with the agricultural estimates branch, Bureau of Agricultural Economics since 1928, died suddenly August 12 at her home in Arlington, Va.

Miss Moore's prize

Miss Anna T. Moore of our Southern Regional Research Laboratory was recently awarded third prize in the plastics and textiles group, photomicrography exhibit, American Society for Testing Materials, for her photomicrograph of wet and dry flax cross-sections.

Farm act digest

Production and Marketing Administration has supplied the editor of *USDA* with some copies of a 4-page digest of the Agricultural Act of 1948. If you want a copy please write the editor (see back page masthead) or phone Miss Arden, extension 4649.

What women don't own

Women have title to only a little more than one-tenth of the Nation's farm land. Women who do own farm land are more often landlords than operators.

32 tons of unfit food

The Food and Drug Administration announced August 4 that 32 tons of unfit food in storage warehouses had been seized *every working day* since the Miller amendment to the Food, Drug, and Cosmetic Act was approved by the President, June 24. The amendment gave FDA the right to protect the public from consuming food that had become defiled by rodents and insects while being stored after interstate shipment.

Cocona

Have you had your cocona today? You don't know what it is? It's an ovoid fruit looking something like a large red or yellow apple, recently acquired in the little-explored reaches of the upper Amazon—*Solanum hyporhodium*, if you want to be ritzy about it. But obviously you are not regularly reading Foreign Agriculture. Better get a copy of the August issue and find out more about this fruit.

C. D. Allen

Charles D. Allen, who succeeded Fred Hoffman, in charge of Bureau of Animal Industry's property office, on Hoffman's retirement in 1945, died suddenly August 16. He had been employed in USDA for about 28 years.

Too hot to work?

The question of when it is too hot to work has been clarified by Personnel Director Reid, in a letter issued August 9, containing a table running from 90° F. and 70 percent humidity to 100° F. and 30 percent, any of which tabulated conditions can result in worker dismissal. See the letter for details.

FAR's fisherman

Arthur M. Sandberg, fish marketing specialist of Fish and Wildlife Service, Department of the Interior, has recently been assigned to our Office of Foreign Agricultural Relations to conduct special foreign market studies on fish products under a Research and Marketing Act project.

TVA Ag correlating committee

J. C. Dykes, Assistant Chief, Soil Conservation Service, has been designated USDA's representative on the TVA Agricultural Correlating Committee.

Interesting magazines

You'll find direct refutation of the idea that Government publications are inevitably stuffy in the August-September Extension Service Review and in September Soil Conservation, both of which are interesting, readable magazines.

Wheat-straw newsprint

The New York Times for August 15 carried a story of considerable length about the wheat-straw newsprint and similar cellulose products developed at the Northern Regional Research Laboratory under direction of Drs. E. C. Lathrop and S. I. Aronovsky.

Deep freeze and southern farmers

The New York Times of August 15 contained an interesting discussion, headed from West Palm Beach, to the effect that the use of freezer lockers, which permits safe storage of midsummer crops, held a real threat to winter trade in lima beans, winter peas, and other such fresh crops from Florida, Texas, and southern California.

Management training

The second Administrative Management Training Program begins October 10 and continues through December 10, though there will be no sessions November 22-26. About one candidate per agency can be accepted for this series of forty 1½-hour sessions, 9 to 10:30 a. m., room 6962-S. The purpose—to train outstanding employees possessing administrative and executive responsibilities in the broader phases of administrative management.

Graduate School survey

Future programs and structure of the USDA Graduate School are under study by a Committee on Long-Range Plans of which Sherman E. Johnson is Chairman. The plan is to determine our major educational needs in the years to come and to provide services and programs to supply them; to assess the extent to which needs are now being met; to recommend changes in or additions to GS programs, and the manner in which they can best be accomplished. SUGGESTIONS ARE IN DEMAND! Send yours to Sherman E. Johnson, Chairman of the Committee.

Ag leader's news column

If you want to know how to make an agricultural leader's news column interesting, readable, and effective, don't miss J. M. Eleazer's article on the subject in June *Better Farming Methods*.

Gobbledygook fanciers

It is suggested that you might garner some exquisite samples of technical gobbledygook, or learned lingo, from Dr. Laszlo Radvanyi's International Directory of Opinion and Attitude Research (Mexico City, 1948); for small samples see Archibald S. Bennett's "Listen to the Learned Lingo," in *Printers' Ink* for August 6, last page.

Isotopes and agriculture

The Fourth Semiannual Report of the United States Atomic Energy Commission contains a section on the utilization of isotopes in agricultural research, pages 25-28, and also, appendix 1, pages 103-113, summarizes the status of projects in plant and livestock physiology being carried on in this field by various university, USDA, and other United States laboratories.

Floyd F. Smith

Dr. Smith, Bureau of Entomology and Plant Quarantine, recently received a cash award from the Society of American Florists and Ornamental Horticulturists for the year's outstanding accomplishment in floriculture in work done in developing aerosols for the control of insects and mites affecting greenhouse ornamentals.

New info head

Kathryn Cronister has been appointed head, Information Division, Bureau of Human Nutrition and Home Economics, of which she has been assistant head. Miss Cronister came to the Bureau in 1936 from the University of Pittsburgh where she received her bachelor's degree in economics and worked on publications for the Bureau of Business Research. During her first 5 years with the HNHE she handled editorial work on the reports of the Consumer Purchases Study; later was in charge of the Bureau's publication work. She succeeds the late Ruth Van Deman.

Negro land-grant RMA survey

Following a conference between the Secretary and his two special assistants, Dr. F. D. Patterson of Tuskegee and Claude A. Barnett of the Associated Negro Press, a 4-month survey is to be made of the Negro Land-Grant Colleges and associated institutions to explore the possibilities of utilizing them in carrying out Research and Marketing Act projects. Dr. J. R. Otis, Alabama State Leader of Negro Extension Work, is the well-qualified specialist who has been appointed to make the study.

This didn't happen here

Paul Vincent recently gathered 50 advertisements of various concerns each bearing a coupon asking the reader to write in at once and get this or that. He wrote all 50, typing his name beneath his signature. His name was spelled wrongly in 12 of the replies; 6 replies came postage-due; 4 circulars came in bad condition; and he received 2 empty envelopes. While his requests reached the advertisers in from 4 hours to 4 days, only 8 replies came in 10 days; others took 3 weeks to 30 days. At least the Government bureaucracy wasn't guilty here. For more detail see Vincent's article in August 6, 1948, *Printer's Ink*, available from the USDA Library.

One each 14 seconds

Operating reports of Rural Electrification Administration borrowers for May show that they added more than 51,000 consumers in that month, a new high mark. That is one connection every 14 seconds of each working day. But REA cautions that about 2,000,000 farms are still without service.

Dr. Glenn R. Smith

Dr. Smith, former director of research for Farm Credit Administration at Columbia, S. C., became an Experiment Station Administrator in Office of Experiment Stations, July 15. A native of North Carolina, he took a bachelor's and a master's degree in agricultural economics at North Carolina State College, and a Ph. D. in marketing at Cornell. He has been with FCA in Columbia since July 1, 1940.

ACE

The American Association of Agricultural College Editors met this year at Spokane as guests of Washington State; they decided to meet next year at Cornell. The new officers are Glenn Rutledge of Mississippi, president; William Calkins, California, vice president; Earl Richardson, Michigan, secretary-treasurer; and they with J. M. Eleazer of Clemson and Jean W. Scheel of Oregon, will serve as the executive committee.

Research achievement

Research Achievement Sheet No. 96 (E)—procure from Agricultural Research Administration—tells how treatment with DDT dust controls two types of sucking bugs which, in some years, have decreased the yield of viable sugar beet seed by as much as half. This finding was made in the Bureau of Entomology and Plant Quarantine at a cost of about \$90,000, and is worth half a million dollars to Arizona sugar beet seed growers each year.

Where the ducks went

Dr. Edward H. Graham of Soil Conservation Service tells about a farmer who complained that he no longer had ducks on his pond. An investigating biologist discovered that that was because he was trapping the skunks who dug the snapping turtle eggs out of the sand and ate them. The fewer the skunks the more snapping turtles there were, and they began to feed on the ducklings. The ducks simply refused to nest where they were thus molested. Dr. Graham says you just have to think these things out ecologically—I, e., duck to skunk to snapping turtle and back.

Chemicals and soil life

In a recent *USDA* we pointed out the importance of thoroughly testing powerful new chemicals designed to control crop pests. There is always the possibility that such chemicals may destroy crop friends as well as enemies. Soil micro-organisms, for example, are affected by some of the new insecticides according to a study made by Dr. Nathan R. Smith and Marie E. Wenzel, Bureau of Plant Industry, Soils and Agricultural Engineering bacteriologists. Their results show that benzene hexachloride containing 10 to 12 percent of the gamma isomer, and applied at rates of 100 to 500 pounds per acre, is definitely toxic to bacteria producing nitrite and nitrate in the soil. Application of DDT to soil at rates up to 400 pounds per acre appears to have no harmful effects on soil organisms. The lack of injury to the soil micro-organisms, Dr. Smith notes, does not mean that the chemical will be safe for higher plants.

Lindstrom to Venice

Chester A. Lindstrom, Chief of our Motion Picture Service, was designated to represent the United States Government at the Ninth International Exhibition of Cinematographic Art at Venice, Italy, August 11-26. The following Government pictures were entered in the Exhibition: A Decision for Bill (USDA); Dead Out (USDA); Hurricane Circuit (State); Miracle of Living (Army); Naval Photography in Science (Navy); Road to Democracy (Army); Sad Sack (cartoon—Veterans Administration); The Starting Line (Federal Security Agency); Then It Happened (USDA); Toward Independence (Army); Trailer 201 (State). Mr. Lindstrom left by air on August 6.

Womack dead

Rural Electrification Administration lost a valued employee on August 3 when Robert H. Womack, of its Information Services Division, died in Navy Medical Center. He had been in poor health for some time, and had been away from his desk for more than 3 months. A native of Missouri, Mr. Womack was editor of a country newspaper in Flat River, Mo., for a dozen years, and secretary to Congressman Clyde Williams for four terms. He joined REA in 1942, for a few months, then returned in 1945.

How did they survive?

Ever wonder how mankind managed to live through to the present time when he has to have a dozen or so vitamins, that many or more amino acids, a few fatty acids, still some other acids, alkalis, carbohydrates, fats and what not? If you have, you'll find some interesting and thought-provoking observations in *Not by Bread Alone* by Vilhjalmur Stefansson—people with perfect teeth and robust health on a diet of meat alone in New York City; two pemmican wars, the latest in the 1940's. The editor's pappy, now a brisk 88, often says: "I got one orange a year when I was a kid—in the bottom of my Christmas stocking. How did I survive?" I don't know, but he did!

BAE self-revealed

Bureau of Agricultural Economics has a new publication just out entitled "Agricultural Economic and Statistical Publications." It is really more than that. It tells what BAE is and does; it lists all the economic and statistical publications the Bureau now has available, as well as describing its periodicals and reports. It outlines the Bureau's organization, tells who is in charge of what, gives the essential information about field offices and field-staff investigations, and explains how to order materials and get on BAE mailing lists. We strongly suggest that you consult it, if you use or intend to use BAE's services and publications.

Anna Jim

Anna Jim Holman, formerly the yeast that kept Extension Information in a ferment in Washington, D. C., and now stationed in Pullman, Wash., took a vacation job with the AP in Spokane—a fine example for any Government information worker to follow—if he or she can. When she left, and things settled down, and the office again assumed its normal inertia, Murlin B. Spencer, chief of Spokane's AP Bureau, wrote her: "Something has gone out of the AP, and I couldn't for the life of me imagine what it was until I remembered you no longer were around to bolster the Spokane AP staff. And when you bolster the Spokane Bureau, you also bolster the AP entirely." The roof on the Spokane Bureau has been reanchored and is now safe again.

Hybrid-corn makers

In connection with A. Richard Crabb's recent book from Rutgers Press, *The Hybrid-Corn Makers*, we suggest that you read *The Lay of the Corn-Huckster* by Frederick D. Richey, in the January 1948, *Journal of Heredity*, published by the American Genetic Association, Washington, D. C. Richey is himself a hybrid-corn maker, and is stationed at Tennessee Agricultural Experiment Station, though a staff member of our Bureau of Plant Industry, Soils, and Agricultural Engineering.

Disease X

It's not Mr. X but "Disease X" that bothers our livestock scientists, a baffling cattle malady also called "double X disease," and sometimes several other rather secular names. It has become the object of study by State and Federal scientists after causing serious losses in 26 States, and threatening the production of meat, milk, and other animal products. A conference was held in Washington July 26-27 to develop a program for a field survey of and a research attack on the disease. Disease X appears not to be an infection, but to be caused by substances in the forage or soil. Experimental transmission has failed; so has drug therapy. You will find more details in No. 1686, for which write Press Service, USDA.

Worm's life

A. C. Evans had a comprehensive article giving "New Facts About Earthworms," in the Winter 1947, *Countryman* (England). He showed, among other things, that the worms are more plentiful in soil fertilized with farmyard manure, but they are no less plentiful in soil upon which mineral fertilizers are used than in that which is neither manured nor fertilized. He concluded: "It is clear that earthworms have important effects on the soil, the condition of which in turn affects their activities, but the important question, 'what effects have they in soil fertility?' cannot yet be answered adequately. There is still a great deal to be learnt, particularly with regard to the connection between worms and the organic matter in the soil, and also their relations to other soil organisms such as bacteria and fungi."

Free-fall containers

Those winged fiber containers to be dropped from planes, described in *Business Week* for May 1, 1948, were designed at Forest Products Laboratory, Madison, Wis. The armed services had demanded a free-fall container, less expensive than the customary cargo-parachute-plus-container ensemble, which would land vital supplies like food and medicine without damage. The "aerodrop container" finally developed by our FS workers was an engineering success, but the war ended before it came into field use. It is now being used by a chemical company for free distribution of a water-purifying compound to the Red Cross. It has fiberboard wings which open during the drop and break its fall. Livestock breeders' associations are studying it for possible use in artificial insemination work.

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Correspondence should be addressed to T. Swann Harding, Editor of *USDA*, Office of Information, Department of Agriculture, Washington 25, D. C. Washington or field employees, please write instead of phoning.

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USDA

FOR SEPTEMBER 27, 1948

Naval stores

PRODUCING NAVAL stores—principally turpentine and rosin—from pine wood and gum is one of our oldest industries. It became important in the Southern Colonies before the War of Independence, and provided pitch and pine tar for calking ships and weatherproofing rope rigging. Today turpentine is important as a paint solvent or thinner, for household medicinal purposes, and in various synthetics, industrial chemicals, pharmaceuticals, and insecticides. A major outlet for rosin is in paper manufacture and for paper sizing. It is also used in industrial chemicals, pharmaceuticals, synthetics, soap, rubber, adhesives, printing ink, linoleum, shoe and floor polishes, paints and varnishes.

Joint efforts of Forest Service and the Bureau of Agricultural and Industrial Chemistry have transformed and modernized this industry in recent years. The Forest Service has shone in matters like timber conservation, fire prevention, and treating pine faces to stimulate them to exude more gum; AIC in developing improved methods of gum processing, raising yields, and improving the quality of gum turpentine and rosin. Proper management of this industry improves rural income and aids forest conservation in the South; gum naval stores provide a profitable return from timberland in addition to lumber.

For the year ended March 1948, production of wood and gum naval stores amounted to 640,000 fifty-gallon barrels of turpentine and nearly 2 million 520-pound drums of rosin—with a total value of 100 million dollars. As recently as 1935, most of the production came from operators using crude methods and simple equipment. AIC and its predecessor units made the first major improvements in the fire still in 1927, and a year later developed a new gum-distilling process using steam. The Naval Stores Station

Degrees to Rohwer and Popham

Sievert A. Rohwer, Assistant Chief of the Bureau of Entomology and Plant Quarantine in charge of regulatory work, received the honorary degree of doctor of science from his alma mater, the University of Colorado, on August 28. William L. Popham, Assistant Chief in charge of control operations, was similarly honored on June 7, by Montana State College. Dr. Rohwer has held important positions in the Department since 1909, and has made outstanding contributions in the research, administrative, and regulatory phases of entomology. Dr. Popham has served in the Department since 1922 and, since 1941, has directed the Bureau's insect pest and plant disease control and eradication activities, mostly large-scale projects conducted cooperatively with other agencies.

Louis F. Champlin

Louis F. Champlin, veteran USDA marketing specialist, died August 28, in Brooklyn. He was in charge of the New York office, Dairy and Poultry Market News Service, PMA, having been in this unit since July 17, 1923. He was a native of Tacoma and a graduate of Washington State College.

Retired

Millard B. Hess, Grain Branch, PMA, retired August 31, after more than 40 years of continuous service. He entered the old Bureau of Statistics January 2, 1908, and served in several other agencies working mainly on seed and seed procurement.

was established near Olustree, Fla., in 1931, and developed better methods of cleaning gum and of dehydrating turpentine by running it through a bed of rock salt.

Steam distillation, gum cleaning, and turpentine dehydration largely revolutionized the industry. This past summer the Naval Stores Station put into operation a continuous steam still for processing cleaned pine gum, making possible a great improvement over the batch processing methods currently used. The still requires only one operator instead of the two required by the batch-type stills. It permits more accurate control and produces products of uniform high quality. This now modernized and profitable industry owes much to FS and AIC.

Blodgett's Hotel

RECENTLY (July 11) Richard L. Coe wrote in the Washington Post about the first theatrical performance put on in Washington, D. C. He had found in Philadelphia certain records published by one William B. Wood, described as a director of Philadelphia, Baltimore, Washington, and Alexandria Theaters. Wood was a member of a company managed by Thomas Wignell who, in the spring of 1800, was requested to establish a theater in Washington, D. C. The account continued:

A company of gentlemen had erected, but not completed, for the purpose of a large hotel originally, the extensive building, subsequently known for many years as the post office and patent office, unfortunately afterwards destroyed by fire. It consisted of a large, spacious center building, with two extensive wings. The former was offered by the proprietors as an eligible structure for our purpose; and its capacious size offered ample space for such accommodations as would be required in furnishing dramatic entertainments to the citizens of Washington, Georgetown, and Alexandria, as well as of the extended neighborhood around.

This "large and lofty central edifice" was transformed into a theater, and the opening play was Venice Preserved. It was warmly received but in time expenses exceeded income and the venture failed. This building was Blodgett's Hotel, erected in the latter 1790's, but purchased, in 1810, by the Federal Government, and long occupied by the Post Office Department, the Washington City Post Office, and the Department of Agriculture's parent, the Patent Office.

The building burned late in 1836, about 6 months after Henry L. Ellsworth, who procured the first Federal appropriation for agricultural purposes, assumed office as Commissioner of Patents. It stood on the plot of ground bounded by 7th and 8th, E and F Streets NW., and now occupied by the old building in which the U. S. Tariff Commission is housed. In erecting that building there was torn down the shed from which Samuel F. B. Morse sent his famous message, "What hath God wrought?" on his newly invented telegraph. As a sort of memorial, the old Tariff Commission Building to this day also houses the oldest telegraph office in Washington, D. C.

DISTRIBUTION OF USDA

This employee house organ, *USDA*, is and long has been distributed by Mrs. Monica T. Crocker, Division of Training, Office of Personnel, USDA, Washington 25, D. C., Room 347W, Ext. 3185. The editor does NOT distribute *USDA*. Please address all questions regarding distribution to Mrs. Crocker.

Mrs. Nellie Thrasher had a farm

MRS. NELLIE THRASHER, a Frederick County, Md., widow, had a weary old 175-acre farm that reached languidly up the side of Catoctin Mountain. There were gullies, unproductive pastures, and senile cropland eroded by generations of square farming. *But miracles can happen.* On August 18, 1948, between the hours of 9 a. m. and 5 p. m., the miracle of science visited the farm and 500 volunteer workers transformed it into streamlined modernity.

They built 4,500 feet of diversion terraces. They sloped and seeded the gullies. They put in a 1-acre fish pond and a smaller pond for stock water. Fifty-two acres were sown to hay-type pastures; 14 were disked, limed, fertilized, and seeded for permanent pasture. All old inside fences were removed, and 600 rods of new contour fencing set to fit the farm to its new conservation pattern. The famished soil was fed 92 tons of lime and ground limestone. Its 75 acres of cropland were strip-cropped, disked, and seeded to begin the new conservation rotation. The workers erected a 22-cow dairy barn and a concrete milk house; they put in a new farm road. They painted and insulated the dwelling, and graded, landscaped, and planted the yard. They put in a new drainage system on the low, wet part of the farm. A wildlife area and a new sustained-use woodland plan were set up on the mountainside. Tree surgeons ministered to the giant maples in the yard, letting the light into the kitchen.

Some 45,000 persons watched this modern agricultural epic unfold, as 175 giant machines hurtled over the fields, putting in a complete soil and water conservation plan in 1 day. Better Lands for Better Living was the slogan. Thus it was that a farm two centuries old got a major face lifting and renewed its youth. Then the Lord sent heavy rains the next day to prove the value of planned soil conservation!

This demonstration was sponsored by the Frederick County Pomona Grange and 55 other local and State groups, including the Frederick and Catoctin Soil Conservation Districts. Farm machinery and heavy equipment were provided by 88 neighboring farmers and equipment dealers. All materials and facilities were donated by business concerns and civic groups. Cash contributions came in from 260 different sources. Secretary Brannan was there, but it was the people's day. SCS technician Rhea T. Kincaid developed the farm plan; Dis-

trict Conservationist Carl Inking directed men and machines via a walkie-talkie; Extension Service's Edward M. Rider from Maryland University, did a bang-up job of publicity. Mrs. Thrasher still has a farm—the same old farm—yet a very, very different one.

Rural health

WHEN YOU MENTION the country, most people think of "good health." To them, then, it may be quite a shock to read *Rural Health and Medical Care* (McGraw-Hill, 1948, \$6.50) by Drs. Frederick D. Mott and Milton I. Roemer, former U. S. Public Health Service officers assigned to the Farm Security Administration (now Farmers Home Administration). In the book you read cold figures on rural ill-health, rural slums, rural lack of sanitation, rural malnutrition. The two former USDA workers have done an excellent job of relating socioeconomic conditions to the health and medical care problems of the 57 million Americans who live in the rural and small town areas. The book contains a wealth of statistical material, yet its very readable narrative makes possible a layman's interpretation, while the statistics themselves make it the most complete existing source-book on the subject of rural health.

The authors point out that such suggested solutions as national health insurance alone cannot solve all the major problems of rural health. First must come improved sanitary conditions, higher economic standards for the low-income farm families, the gradual rebuilding of hereditary strains strong enough to withstand disease. But some variety of compulsory health insurance is needed, say these authors, so that the standards of rural medical care available to such families will be made more adequate. No nation can be healthy so long as there are whole counties without hospitals or regular public health services; when two out of every three families in rural America still use outdoor privies; and when there are far too few doctors, nurses, dentists, and public health experts to serve all rural sections.

Dr. Mott, after leaving FSA in 1946, became chairman of the Saskatchewan Health Services Planning Commission for our Canadian neighbor; Dr. Roemer is directing a demonstration county health program at Morgantown, W. Va.

PARTICIPATE HOWEVER YOU CAN IN
THE NATION-WIDE OBSERVANCE
OF UNITED NATIONS DAY, OCTOBER 21

The Civil Service

CIVIL SERVICE COMMISSIONER Arthur S. Flemming, who resigned to head Ohio Wesleyan University, recently discussed the Federal Civil Service. One thing wrong, said he, is too few good supervisors, the 15 to 20 percent of the total employees who hold the key jobs. Supervisors must be improved so as better to impress those under them with the importance of their work, and to set standards to guide them. Mr. Flemming also feels we have been short-sighted in not making Government service more attractive to top-flight executives who can rarely be held at a ceiling of \$10,000 annually.

Of the 2,086,220 Government employees you may be interested to know, 870,226 work in the military establishments, 498,415 in the Post Office Department, and 195,545 in Veterans' Administration. There you have three-fourths of all of them, and you discover that even the USDA is in the small-potato class. Says Flemming, we must agree on what we want the Government to do, and then get the best possible management and do it with the fewest possible workers. Furthermore, he said that in the fiscal year ended June 30, 14,391 were discharged because they were not doing their work properly—and they say the Government can't fire you.

Other weaknesses Flemming cited: There are cases where two or more employees are used to do the work one could do. There are some lazy and inefficient employees who could be discharged for cause if supervisors persisted. There are cases of politics, sometimes personal, maneuvering appointments and promotions.

Too good to keep

THIS LETTER FROM a Washington USDA secretary anent "Reprise on stenography," in *USDA* for August 16, is much too good to keep—too good even to abbreviate greatly. After declaring that "a real executive knows how to make shorthand effective," and that the USDA has among its administrators and executives some of the worst handwriting and the most atrocious spelling anywhere in captivity, she goes to town as follows:

The average executive doesn't know how to dictate. Undoubtedly that is left out of the education of most males, and it certainly isn't stressed in the USDA. Just because a male has a college degree, it's taken for granted that he has executive ability, and executive ability means knowing how to dictate, how to spell, and mainly—how to write legibly.

There seemingly are two types of people—one ear-minded and the other eye-minded. The ear-minded type can dictate and do a first-class job. But the eye-minded type scribbles unendingly, crossing out this 'n that, writing down the sides of the margins, until the draft is something out of this world, and resembles a piece of paper picked up in somebody's henyard. It takes a muscular typist to follow a job like that; the result is usually a stiff neck and a couple of aching eyeballs.

How I'd love to collect samples of the executive handwriting from the Department and drape them on a main bulletin board for all to see! It might stimulate USDA to promote night courses to avoid just this. Another cure for an executive who turns in gosh-awful handwriting would be for the typist to keep a baseball bat beside her typewriter, and every time illegible work is turned in she should use the bat and knock him out until such time as he either learns how to write, or is more careful.

Brief but important

Goals committee

Secretary's Memorandum No. 1140, Supplement 4, August 19, announced the current membership of the 1949 Production Goals Coordinating Committee under the chairmanship of W. A. Minor, Office of the Secretary.

First nutrition specialist

Miss Miriam Birdseye, the Nation's first food and nutrition extension specialist, and a USDA employee for nearly 30 years, died August 28, aged 70, at Carmel, Calif.

Importance of accurate information

More copies of this paper, explaining the history, functions, and structure of the Office of Information, and commenting on various aspects of information work, are still available. Write the editor or phone Miss Arden, Ext. 4649.

More leave lost

We hear also that E. W. Dunnam, entomologist with the Bureau of Entomology and Plant Quarantine at Leland, Miss., has lost 53 days of annual leave during the past 4 years because pressure of work made it inconvenient or inadvisable to take it.

Telegraphic services

You may want to see a copy of Secretary Brannan's August 17 Memorandum on our telegraphic services; procure it from Secretary's Records Section, P&O, Room 134W, Ext. 3337. Field people write in.

Meat and lettuce

Facilities of the Agricultural Remount Service, Front Royal, Va., will be converted by USDA into a station for beef-cattle research; details in No. 1825, for which write Press Service. * * * Progress, a new early head lettuce (crisp-head) highly resistant to tipburn, has been released by the USDA and New Jersey Agricultural Experiment Station; details in No. 1818.

Postwar prices

Since Frederick C. Mills is the outstanding authority in the price field, it is strongly suggested that you get hold of his "The Structure of Postwar Prices," Occasional Paper 27, National Bureau of Economic Research, Inc., 1819 Broadway, New York City 23. If you have to buy it, the cost is 75 cents, but the Library has loan copies. It definitely shows that while most of us have, since 1939, about doubled or tripled our asking prices, we're giving mighty little more for what we're getting; that equals inflation.

Our Plundered Planet

We happened to tune in Hugh Bennett, on America United, while reading Fairfield Osborn's remarkable book, *Our Plundered Planet*, which clearly and compactly, briefly and dramatically—and in excellent language, shows how we human beings have foolishly pursued a policy of so exploiting our natural resources that we may one day render our good earth as dead as the moon. The book was recently published by Little, Brown & Co., Boston, but our Library has copies to loan. The blurb correctly says: "With disturbing clarity this book points out that we are more likely to destroy ourselves in our persistent and world-wide conflict with nature than in any war of weapons yet devised." It is strongly suggested that you read this brief book.

Meat flavor

Chemists at the Arthur D. Little Laboratories recently saved up a lot of money and bought a few pounds of meat. Then, instead of enjoying it like normal men, they tried to find out where its flavor was. The juice squeezed out of the raw meat tasted weakly like blood and had a similar odor. But flavor developed in the cooked meat from changes that occurred in the fiber, the flavor being barely detectable after 5 minutes, marked in 35, and powerful in 3½ hours, but it was mostly odor and little taste, and hydrogen sulfide and a few acids and amines accounted for it. Phue! on the gourmet who relishes his meat! How about a plug of nice raw carrot?

Oldest farmer club?

We add the question mark because we are usually wrong when we assert anything positively. But 9 miles north of Washington, in Montgomery County, Md., is the Sandy Spring Farmers Club, organized in May 1844, and it has missed only 2 meetings in the ensuing 104 years. It claims to be the oldest farmers club in existence. Good farm land sold from \$2 to \$6 an acre in this vicinity in the depression of the late 1830's. The club's membership originally limited to 12, has increased to 16, and is again limited there. Is this the oldest club? Line for Editorial Enlightenment forms to the right.

That Brahma hen

The New York Herald Tribune stirred up controversy by running an editorial August 21 on "The Brahminic Hen," and suggesting that Plymouth Rock, a Wyandotte, or a bronze gobbler might better have had its portrait on the postage stamp honoring the American chickens' centennial. As Paul Ives, Chairman of the One Hundredth Boston Poultry Show brought out, the blood of the Brahma flows through all our present breeds, the Plymouth Rock was originated in Connecticut 25 years after the first Boston Poultry Show, and had it appeared on the stamp, breeders of Rhode Island Reds, New Hampshires, Wyandottes, and bronze gobblers would have declared war. The Brahma, not bred commercially, was a far safer choice for the bewildered Post Office Department, and it is a common ancestor of all chicken breeds—though not of the gobbler!

Regional lab work

We still have a few stapled separates of articles from the American Journal of Pharmacy dealing with phases of the work at the Regional Research Laboratories, as follows: A Remarkable Bean Is the Soy; Wax from Sugarcane; Making Big Ones Out of Little Ones (on synthetic fibers); Sugar-Coating the Furniture for Better Wear (a new finish for wood and metal made from table sugar); Whiskey Is a Mere Byproduct (the alcohol fermentation industry.) For copies write Editor USDA and cite article desired by title.

Ovation to Timmons

F. L. Timmons of weed investigations, Bureau of Plant Industry, Soils, and Agricultural Engineering, was given an unusual and heart-warming ovation at the Tenth Annual Kansas State Weed Conference in Hays, Kans., on the occasion of his transfer to Utah, and in recognition of his splendid achievements at the Hays station. J. C. Mohler, secretary of the Kansas State Board of Agriculture, paid high tribute. A fine watch was presented to Mr. Timmons at an evening banquet with suitable ceremonies.

Fabian Garcia

One of the most unusual agricultural experiment station directors ever to function died August 6, when Director Emeritus Garcia of the New Mexico Station, passed on. Born obscurely of Mexican-Indian parentage, he surmounted all but insuperable obstacles, finally completed his education in horticulture at Cornell, and ably served the farmers and cattlemen of New Mexico for 40 years. He developed Mesilla Valley, making it a highly productive farm area and literally establishing there many crop industries which are now good paying enterprises. Probably no other experiment station director encountered and overcame so many serious obstacles, or accomplished so much for the people he served.

Louise Gerhart, author

Miss Louise A. Gerhart, a CAF-5 clerk in the Bureau of Animal Industry, is the author of a well-written and highly readable article on "Serena—the Benevolent Bovine," which appeared in the Cattleman for August. Miss Gerhart is stationed in Albuquerque. Her subject is the new ear tick remedy Dr. Helpful applied to Serena.

Time waste in dictating

A Washington supersecretary hit the nail on the head by writing in that the time-waste element in dictating to a stenographer is usually ye dictator's "lack of mental organization of material to say nothing of lack of fluency of expression." * * * Would I go too far in proposing that everyone who uses dictation in his work be required either to complete a journalism course or pass an examination proving his competence?" Hear! Hear! Now what have you to say?

Radio school notes

Ken Gapen, Radio Service, Office of Information, USDA, has copies of a mimeographed memorandum prepared by him, Dana Reynolds, and Joe Tonkin, which should be helpful to all of you who are interested in radio or aspire to do radio work. It is essentially an outline of the material transmitted by the leader to his students in the radio schools held in various parts of the country by Gapen, Reynolds, and Tonkin. If you want more details on how to build and present radio programs write for a copy to the address above.

Soil conservation caravan

Through cooperation of State and Federal units, the Kentucky Soil Conservation Caravan assembled at the State Fair, Louisville, on September 18, to proceed throughout the State and operate in 12 high-conservation field days ending October 18. Possibly 50,000 will attend these field days, during which conservationists make valuable contacts with executives of large equipment and supply companies as well as with progressive farm people. Says District Conservationist T. H. Ford: "I am surprised and humbled by the knowledge which these people have about the soil conservation movement, and by the high regard in which they hold it."

Foreign Agriculture for September carries an article on the growing of teak in the Canal Zone. Increasing demand for this hard, durable wood has focused interest upon it in the Panama Canal Zone Experimental Gardens. Teak was first introduced in the Zone in 1926, through our Bureau of Plant Industry, and by means of a package of seed from Ceylon. While there is as yet no teak supply in this hemisphere, the trees have grown phenomenally under experimental trial and teak production may be possible there and elsewhere in tropical America.

Journalism profession

The first list of colleges accredited by the American Council for Education for Journalism was released this summer. August Quill lists the 34 colleges with accredited courses. University of Wisconsin's department of agricultural journalism being listed separately as a thirty-fifth institution. It is hoped that the ACEJ will attain the same weight in the profession of journalism as the American Bar Association has for years had in the legal profession. See August Quill for details.

Population and acreage

The Inter-American Conference on the Conservation of Renewable Natural Resources, which began in Denver, September 7, faced the old problem of population versus acreage. Latin America's population which is now about 150 million is expected to double by 1983. This means that South America's current 2.2 acres per capita open for cultivation will be reduced to 1.1 acre in 1983, by population increase alone. Meanwhile the water, forests, grasslands, and wildlife of the Western Hemisphere are still being destroyed at an appalling rate. The Conference was called by the United States at the request of the Pan American Union, to consider such hemispheric conservation problems.

First sick leave in 36 years

When Jenkin W. Jones, Bureau of Plant Industry, Soils and Agricultural Engineering rice specialist, went to the hospital recently, he took his first sick leave in 36 years of Government service. Mr. Jones, whose work in rice breeding and production is internationally known, joined the Department in 1912, shortly after receiving a B. S. degree from Utah College. His first assignment was at the Cheyenne, Wyo., field station. Later he served at Nephi, Utah, and Biggs, Calif. He earned an M. S. at the University of California while he was on the staff at Biggs. In 1925, he went to the Orient to collect rice varieties and study production and improvement of the crop in Japan, Korea, China, Java, and the Philippines. Since 1930, he has been in charge of the Department's research in rice production and improvement.

Cline succeeds Sparhawk

Albert C. Cline, former Director of the Harvard University Forest, Petersham, Mass., the oldest intensively managed forest in the United States, has been placed in charge of Forest Service's studies of the world's forest resources and industries, succeeding Wm. Norwood Sparhawk, recently retired. Mr. Cline entered FS in July 1916, to head the Industry-Resource Analysis Section, Division of Forest Economics. He took his undergraduate work and a master's degree at New York State College of Forestry. In 1922, and a second master's in forestry at Harvard the following year. During World War II he was with both OPA and WPB, and he was a member of the U. S. Timber Mission to London in 1915. He was later assigned to the U. S. Military Government in Austria and, in 1946, became associated with the Civilian Production Administration.

For the first time since it was started rolling at Hot Springs in 1943, the Food and Agriculture Organization of the United Nations will come back to the United States (its temporary headquarters) to hold its annual Conference. The Conference session will open November 15 at the Shoreham Hotel, Washington, D. C. The first full-fledged intergovernmental consultation on national agricultural policies is expected to be a feature of the Conference.

Termohlen world poultry head

W. D. Termohlen, Director of PMA's Poultry Branch, was elected President of the World's Poultry Science Association, at the Eighth World Poultry Congress, held in Copenhagen, August 20-27. Among others elected to serve as World Poultry Science Association members of the association's Council were Dr. Morley A. Jull, head of the Poultry Department, University of Maryland, and Joseph Wm. Kinghorne, Assistant Director, Poultry Branch, PMA.

Naval stores

Industrial and Engineering Chemistry for September carries on its front cover a fine pictorial reproduction of the Bureau of Agricultural and Industrial Chemistry's new continuous steam still for the production of turpentine and rosin, hitherto batch-produced; within you'll find the story. Then Ken Huddleston's National County Agent and Vo-Ag Teacher for July ran an article on AIC's Regional Research Laboratories, entitled "Chemurgy Comes of Age," and ornamented with appropriate illustrations. Look it over, too.

Indian Forest Service

Could be that you yourself might be interested in the story on The Indian Forest Service, by Prof. E. P. Stebbing, University of Edinburgh, in Nature (London) for July 24, which the USDA Library has. Incidentally, the same Professor Stebbing writes on "Elm Disease," in Nature for July 31, and speaks highly of Bulletin 841, Cornell Agricultural Experiment Station, "Log Treatments for Bark Beetle Control in Connection With the Dutch Elm Disease."

Northeaster

The editor was just sent his first copy of *The Northeaster*, Summer 1948 Feature Edition, an attractive quarterly published in the interests of cooperative farm credit by the Federal Land Bank, Federal Intermediate Credit Bank, Production Credit Corporation, and the Bank for Cooperatives, all of Springfield, Mass. We find articles therein on tobacco, oyster farming, part-time farming, maple products, market gardening, the farm woods, blueberries, cranberries, quality fruit, livestock, eggs, Arrostok potatoes, and many other topics of interest.

Milner at Northern

The new Director of AIC's Northern Regional Research Laboratory in Peoria is Dr. Reid T. Milner, well-known soybean chemist, a native of Illinois who has been engaged in physical chemical research in USDA for 18 years. From 1939 until 1941 he directed the U. S. Soybean Industrial Products Laboratory at Urbana; since then he has headed the Northern Lab's Analytical and Physical Chemical Division. He has an outstanding record as a scientific investigator and research administrator, and succeeds G. E. Hilbert, who becomes Chief of AIC. Dr. Milner graduated from University of Illinois in 1924, with a B. S. in chemical engineering, took his master's there in physical chemistry a year later, and his doctor's degree at University of California in 1928. His research career began at Bureau of Mines in Pittsburgh, and he entered USDA's old Bureau of Chemistry and Soils in 1930.

We note the Report of Developments in the Campaign Against Foot-and-Mouth Disease in Mexico, No. 15, issued August 9. These mimeographed reports still appear periodically and copies may be procured from the Bureau of Animal Industry. The first report appeared January 18, 1947.

Livestock Market News

The 1947, or 15th edition of Livestock Market News, Statistics and Related Data, has been prepared in processed form for distribution by the Information Branch, Production and Marketing Administration. It is dated July 1948, and mostly comprises statistics collected by the Market News Division, Livestock Branch, PMA. Number of livestock on farms, livestock movements, Federally inspected slaughter, exports and imports, market prices, wholesale and retail prices, wool, and related subjects are covered.

Fruit specialist in Europe

Fred A. Motz, international fruit specialist of Office of Foreign Agricultural Relations, who left Washington in July for further studies and reports on European market outlets for United States fruits under the Research and Marketing Act, has conferred in Paris with representatives of the governments of western Europe on import requirements under the European Recovery Program for 1948-49. Mr. Motz will visit England and possibly other European countries. His initial survey of the western European fruit situation was made last winter and reported in "The Market for U. S. Fresh Fruit in Post-war Europe," Foreign Agriculture Circular FDAP-1-48, issued by FAR in April.

Uncle Sam's ark

Noah and his ark had nothing on Uncle Sam if we take into consideration the Bureau of Animal Industry stating that 42,537 purebred domestic animals were certified for entry into the U. S., duty-free, for breeding purposes during the past fiscal year. This is a record year and, as in previous years, the animals brought in are being used to improve our herds. Over 34,000 were cattle, mostly dairy breeds. Holstein-Friesians predominated. There were over 4,000 sheep, almost 3,000 swine, 260 horses, and numerous dogs. They came from Canada, Europe, Asia, and South America. There was one cat.

Fire Prevention Week is October 3-9 but, if you are wise, you will not confine your fire-preventing activities to that one week, but will spread them throughout the year. Farm fire costs are shared by all. Watch defective chimneys, inflammable roofing, electric wiring, and other fire traps. Don't try to hasten fires by pouring on kerosene; keep oil-, grease-, or paint-soaked rags in metal, covered containers; install lightning rods; smoke with care; and snoop out possible spontaneous combustion in stored hay. Lightning causes most farm fires; defective flues, chimneys, cupolas, and stacks come next.

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USDA

FOR OCTOBER 11, 1948

Price supports

IF YOU HAVE wondered how much agricultural price supports have to do with current high prices of food, here are a few simple facts that may prove of interest. Price support levels and the commodities to which they apply are determined by the Congress. The Department of Agriculture merely administers the laws as passed. Price supports are currently in effect on only three important foods: Eggs, wheat, potatoes. Government buying has had little effect on egg prices, then only in some areas. Wheat prices have dropped about one-third in recent months; bread prices have remained unaffected; something other than the price of wheat keeps up the price of bread. Out of every dollar we spend in our cost-of-living budgets, 1½ cents goes for potatoes; price support for potatoes therefore cannot seriously affect the cost of living.

Prices of other foods are not being supported at all. This is true of beef, pork, lamb, and chickens, for instance. But demand for meat is so great that its selling price is far above levels at which the law would require support to be applied. Americans today are eating 15 percent more meat than they did before the war, and this is a per capita figure. Our population has increased; the number of farmers has decreased. Yet average per capita consumption of our larger population is 15 percent greater than that of our smaller prewar population. Fortunately agricultural programs have helped and induced farmers greatly to increase meat production. If it were not for this, today's meat prices would be still higher. In this sense price supports tend to lower rather than raise the cost of living. Price supports are an insurance for abundant production.

(For more detail write the editor of USDA for a copy of a mimeographed statement: "The Support Price Program.")

Work in PMA

FLEXIBILITY and workability are the goals of the Secretary's Memorandum No. 1226 which outlines the responsibilities of the Production and Marketing Administration. This new memorandum reflects the changes required under the Federal Charter of the Commodity Credit Corporation, but does not alter previously assigned authority of PMA. Activities assigned to PMA fall into four groups: Production Programs; Marketing and Distribution Programs; Price Support and Supply Programs; and Administration and other staff services related to these three groups.

The Production Program controls the Agricultural Conservation Program and the farm-marketing quotas and sugar quotas, carrying them through the State, county, and community levels to direct contact with farmers. Marketing Service and related research, "Section 32" activities, and the School Lunch Program are under the Marketing and Distribution Programs. The Price Support and Supply Programs involve price support activities, and foreign and domestic supply programs and related allocations to the extent these functions of the Commodity Credit Corporation are delegated to PMA by the Corporation. PMA also coordinates all USDA matters connected with the European Recovery Program.

As before, directing personnel for PMA will include the Administrator, a Deputy Administrator, and other needed Assistant Administrators, subject to the supervision of the Secretary. PMA operations are to be carried out by branches established by the Administrator, and these branches may maintain area, State, and local field offices found necessary to the departmental policy of decentralization.

Keep Your Buildings Clean! You Are Their Custodians!

Lunches for 6 million kids

THE LADIES' HOME JOURNAL for September, in an excellent article entitled "Hot School Lunches," tells how the town of Fruitland, Idaho, provides meals for hungry children at a daily cost to each child of 22 cents. Says the Journal, commenting editorially on the national School Lunch Program:

When children return to school this month, at least six million will be assured a hot lunch every day at nominal cost to parents—and without charge if they cannot pay. Public funds from State and Federal appropriations have made this possible under the National School Lunch Act of 1946. An additional million and a half children will benefit from free commodities purchased by the U. S. D. A. to support farm prices.

September issues of two other magazines, Parents' and What's New in Home Economics, also point out the advantages of hot school lunches, in articles written by Margaret M. Morris of the Production and Marketing Administration. Says Mrs. Morris, in Parents' Magazine, "Whether your children walk two blocks or travel twenty miles by bus to school, they can benefit from a lunch program."

What farmers want to read

CONTINUING STUDY of farm publications by the Advertising Research Foundation gradually reveals some interesting trends. First, farm readers are thirsty for localized advice and information and second, farm women share the interests of their husbands far more than city women share those of theirs. For the farm wife often keeps the books and closely follows her husband's problems with stock, feed, and implements. Here is the only business that holds a daily board meeting—around the supper table.

Farm people also rarely skip about in their reading, pass up the men's section of a farm paper to find the woman's section, or vice versa. Farm men are better readers of advertisements than farm women, but more women read the men's news than men read the women's. Moreover, the interest of male farm readers was, by test, diverted to a greater extent and held longer by a picture of a bunch of hogs standing near a tractor than by a glamorous reproduction of a sweater girl, while almost as many women as men carefully examined the picture of a farm feed lot. The writing trend of farm journals more and more approaches the Fleisch ideal, and this has proved to increase readership by as much as 66 percent.

Contribute to the Community Chest

Food, soils, people

THE RACE BETWEEN population growth and arable land tightens up and threatens to exhume old Rev. Malthus any day. During the 30 years before World War II, our food output increased at about the same rate as our population. More rapid increases in food production by far occurred during that war. In the past livestock products have supplied 40 percent of our food energy, 60 percent of our protein, and half of all our nutrients; their production has absorbed nearly 90 percent of the land and 75 percent of the labor used by farmers in food production. The acreage required to produce the diet consumed per person has decreased in recent years because of increases in crop and livestock yields. But, during World War II, we could have supported over 200 million people with our land resources, had they consumed the adequate low-cost diet developed by the Bureau of Human Nutrition and Home Economics.

(See in this connection Raymond P. Christensen's article in September Agricultural Situation, BAE.)

In a recent address Dr. Charles E. Kellogg, a leading USDA soil scientist, said what the world needed to solve its food problem was to develop social institutions to put its soils into production. He estimated that 1.3 billion acres of so far unused land can be developed for crop production, a billion in the Tropics, Africa, South America, and on large tropical islands; the remainder in the Temperate Zone and the frozen tundra. He also estimated that agricultural production in the U. S. and elsewhere in the world could be increased 20 percent or more on present acreages. He held that 1960 world needs for cereals, roots, tubers, and sugar could be met without resort to new soils or yield increases, but that either or both would be required to supply the little more fats and oils and much more beans, peas, nuts, fruits, vegetables, meat and milk the world requires.

The main factors implicated in enabling the world to meet its food needs are, according to Dr. Kellogg, fundamental research, education, and parallel development of industry. He also advocated the manufacture of more fertilizer; rapid world-wide distribution of improved germ plasm, seeds, and plants; irrigation and hydroelectric development where needed; new methods of controlling diseases and insects over wide areas; improved facilities for producing the machinery and equipment required; world-wide publication of simple illustrated pamphlets for farm families.

(See Press Release No. 1929.)

Milk forecasting

HOW TO TELL whether a dairy calf will develop into a good milker costs real money. Five to six million calves are selected annually and kept long enough to find out how well they would produce, which costs \$200 apiece, and totals hundreds of millions of dollars a year. A simple, reliable method of forecasting the heifer's future early in life would be a great boon. So the Bureau of Dairy Industry, in the guise of W. W. Swett and his associates, got busy on that one, discovered that the mammary gland development starts soon after the calf is born, and noted that some calves attain definite stages of development earlier than others.

In time they developed a system of examining quite young calves which enabled them to prognosticate future milk yields. Nearly 100 cows that were graded early for mammary development have now completed production yields. Those in grades 7 to 9 were judged to show advanced development while still in kindergarten (4 months of age) and they produced approximately 4,000 pounds more milk a year on the average than their grade 1 to 3 sisters. Grades assigned at 4 months were more reliable than those assigned later. The method is regarded as mighty promising, but scientists being cautious gentry, it has not yet been released for general use. It requires much more testing before that.

SCIENTIFIC ACHIEVEMENTS

The October 1 edition of *USDA Document No. 6, Important Recent Achievements of Department of Agriculture Scientists*, is now ready for distribution. As you know, research is carried on in the bureaus of ARA, the branches of PMA, and the divisions of SCS, FS, BAE, and FCA. However, some of the agencies are too modest to speak in public about achievements of their scientists—we are reluctant to think there is any other reason for their reticence. But you will find interesting and varied items in the document from the more articulate units. To get fewer than 6 copies per order write the Editor of *USDA* or phone Miss Arden, Ext. 4649.

How do you like your spuds?

"Potato Preferences Among Household Consumers" is new Miscellaneous Publication No. 667, prepared in the Bureau of Agricultural Economics. If you want to know what homemakers look for when they buy spuds, this is your source book. Or you may prefer the more popular version, "People and Potatoes," illustrated. Incidentally, only 2 percent of those interviewed did not eat potatoes. You remember the wag said potatoes were the best substitute for food he'd ever heard of, but they are more than that by far. See the new bulletins for details on consumer preferences.

Insects fly high

THE MORE SCIENTIFICALLY aristocratic the insects get in their ideas of foreign travel the more scientifically precise the scientists become in seeking to impede them. Now our entomologists have developed an automatic centrally controlled device for releasing aerosols to free aircraft of insect hitchhikers. This they had to do because the ordinary aerosol bomb, unless properly used, does not give good results in planes, so you see what trouble high-minded insects make for the scientists.

Airplanes must be carefully freed from insects to protect the Nation from accidental introduction of new pests from abroad. The Public Health Service cooperates in this work. Our records indicate that as many as 2,800 insect species, including 200 or more that feed on plants and are new to the United States, have been found as stowaways on planes arriving in this country. Work on the project here under discussion was initiated a few years ago by the Pan American Sanitary Bureau and the Navy, and has been participated in also by PHS, the Army Air Forces, and our Bureau of Entomology and Plant Quarantine.

The device developed is a flexible manifold system. It was installed experimentally in an Army plane. There is a centrally located aerosol supply tank with copper tubing connecting to electrically controlled valves containing aerosol nozzles. When turned on, the device completely fills the plane with insecticide. The British Armed Forces and their Scientific Office are also interested.

Brief but important

New Secretary's Assistant

Daniel J. Carey, Groton, N. Y., farm operator, has become Assistant to Secretary Brannan. A graduate of Cornell, 1918, he is a member of the Tompkins County Farm Bureau executive committee and of the New York State Farm Bureau Federation Dairy Committee.

Victor E. Anderson

Mr. Anderson, who was special counsel and chief of the Field Investigation Section in early AAA days died suddenly in Chicago, September 12, at the age of 65. Since 1937 he has been U. S. Attorney for Minnesota.

Lee M. Clark retires

Lee M. Clark, who entered Bureau of Chemistry in 1916, recently retired voluntarily from his job as Executive Officer, Food and Drug Administration. He worked for some time with Fred B. Linton, who retired a few years ago, and was recently pictured in the Washington, D. C. press abashed at the impertinence of a mushroom which had suddenly shot right up through the middle of his asphalt driveway!

Judge McGregor retires

Judge Thomas H. McGregor, attorney in the Little Rock Regional Office, retired on August 31, after 15 years in the Solicitor's Office. Mr. McGregor, a native of Louisiana received his education at the Peabody Normal College, Nashville, and the University of Nashville. His first assignment in the Solicitor's Office was as a regional title attorney in Alexandria, La., which position he held until January 16, 1938, when he joined the staff of the Little Rock Office. Mr. McGregor is returning to Alexandria, La., his home town, to enter the private practice of law.

Director Brehm now President

Dean C. W. Brehm, Director of Extension in Tennessee, who has acted as the President of the University of Tennessee since the retirement of Dr. James D. Hoskins 2 years ago, has been elected President of the university. J. H. McLeod, who has been active in Tennessee extension work since the middle of 1929, and who has been Vice Director of Extension since November 1, 1945, has been named Director of Extension, Dean of the College of Agriculture, and Director of the Tennessee Agricultural Experiment Station.

Dr. Hultz steps up

Dr. Fred S. Hultz, head of the department of animal husbandry, University of Wyoming, has been elected President of North Dakota Agricultural College to succeed Dr. John H. Lonwell, who resigned to become Dean of the College of Agriculture, University of Missouri. A graduate of Iowa State, Dr. Hultz was first associate editor, then editor of the Wyoming Stockman-Farmer, 1923-28, but has been professor of animal husbandry at Wyoming since 1923. From 1930 until 1934 he served as director of the information service and university editor there also.

Harry L. Brown

Dr. Harry L. Brown, who was Assistant Secretary of Agriculture January 2, 1937, until December 5, 1939, and who is now Vice Chancellor of the University System of Georgia, is one of the U. S. members of the Joint Brazil-U. S. Technical Commission, formed at the request of the Brazilian Government, and now en route to Rio de Janeiro.

Services appreciated

Dr. F. C. Bishopp, Assistant Chief of the Bureau of Entomology and Plant Quarantine, in charge of research, was presented an Army-Navy Certificate of Appreciation on August 18, 1948, for his outstanding services to the war effort. The presentation was made by Major General Hobart R. Gay and Rear Admiral Glenn B. Davis. Dr. Bishopp's contributions to the field of medical and veterinary entomology are well known. His services to our military effort during the recent war were of considerable importance. Dr. Bishopp has been with EPQ for more than 40 years, and has been in charge of the Bureau's research program since 1941.

Dr. Margaret Reid

Dr. Margaret G. Reid has resigned as head of the Family Economics Division of the Bureau of Human Nutrition and Home Economics to accept a position in the department of commerce of the University of Illinois, where she will teach and do research in the field of consumption economics. Before coming to USDA, Dr. Reid spent 13 years on the agricultural economics staff at Iowa State College, where she taught consumption economics courses. Dr. Gertrude S. Weiss is now acting head of the Family Economics Division.

USDA: October 11, 1948

J. Dewey Long

Mr. Long, a native of Iowa, and a graduate of Iowa State in agricultural engineering, has become special assistant to Arthur W. Turner, head of agricultural engineering research in the Bureau of Plant Industry, Soils, and Agricultural Engineering. Mr. Long is the author of several books and other publications in his field, is a past president of the American Society of Agricultural Engineers, and was previously with University of California and the Douglas Fir Plywood Association, at Tacoma, Wash. He just returned from an assignment with the Office of Foreign Agricultural Relations in Bogota, Colombia.

Dr. Shull passes

J. Marion Shull, botanist and botanical artist with old Bureau of Plant Industry for more than 30 years, died September 1. He was one of four distinguished brothers, all renowned in their own fields of science, George Harrison Shull being particularly well known for his work in genetics and on hybrid corn. Dr. J. M. Shull was a native of Ohio, educated at Valparaiso University and the N. Y. Art Student's League. He first taught music and art, then entered the Post Office Department, came to Forest Service in 1907 as a dendrological artist, and entered BPI in 1909. He retired in 1942.

Cheesman retired

William Hannold Cheesman retired September 10 as technical editor, Bureau of Plant Industry, Soils, and Agricultural Engineering, after nearly 44 years of service which began in Civil Service Commission, 1905. A native of New Jersey, he graduated from Dickinson College and, after 8 years in outer darkness, he entered old Biological Survey to stay 29 years as editor. He even passed over to Interior with this unit, and for a while served in Fish and Wildlife Service, meanwhile persuading that Department to establish its fine series of conservation bulletins. His service with PISAE began in 1942. He is a charter member of the American Society of Mammalogists, an associate of the American Ornithologists Union, and a member of the Wilderness Society, and has written widely. Vale and best of luck, sir.

Dr. Patterson, of Maryland

On the evening of September 11, Dr. Harry J. Patterson, retired Dean of Maryland University and Director of Maryland Agricultural Experiment Station, collapsed and died at North Station, Boston, while helping his invalid wife from wheel chair to taxi. The couple were returning from a vacation in Maine. Dr. Patterson, a graduate of Pennsylvania State in 1886, was 82 years of age. He assisted at Penn State experiment station for a short period after graduation, but became chemist and vice director of the Maryland station in 1888. He was later its chief chemist and its Director, and for some time also served as President of Maryland Agricultural College, now Maryland University. He retired in 1937. The editor of *USDA* remembers Dr. Patterson as the editor's first boss in his first job as a dubious research chemist at the Maryland Agricultural Experiment Station.

Graduate School lectures

The course of Graduate School lectures in Jefferson Auditorium at 4:30 alternate Mondays, which began October 4, will continue through until April. General subject: "Resource Utilization and Conservation." *No fees; no registration;* Graduate School will provide you with a list of the lectures on request.

Radio market news

Market news is now available to farmers on nearly 1,100 radio stations, the largest number that have ever carried such reports, and a 45-percent increase over last year. For more detail write Press Service, USDA, and ask for No. 1862.

Extension

Said Norris E. Dodd, Director-General of FAO, recently: "One of the most successful agricultural institutions in this country is the Extension Service. It has no power to do anything on any farm in the United States or to order any farmer to do anything. Yet I think students of our agriculture would grant that American farmers have progressed farther and faster because they have had the help of the county agents and agricultural advisors of the Extension Service."

Shoes

Bureau of Agricultural Economics says that an average of 85 cents out of every dollar you spend for shoes goes for marketing and manufacturing, and only 15 cents for materials. The 85 cents buys assembling, selling and processing hides and skins, and the storage, manufacture, and retailing of the finished shoes; the 15 cents buys hides and skins. Profits take about 7½ percent of the retail price of shoes. About 47 cents of the consumer's dollar goes for wages and salaries paid by manufacturers and distributors, 3.3 cents for advertising, 28 cents for other costs. Greater efficiency in making and selling shoes would lower costs appreciably.

Articulate on stenography

Finally we had letters from all over about this stenography business. They were about evenly divided, as many from those who dictate as from those who take dictation. The majority agreed that typing from material written in longhand would usually be impossible—takes too long to write things out that way and the handwriting is usually atrocious, if not odious. Many supervisors praised the high quality of their stenographers. But so many who take dictation complained about the inability of executives, supervisors, and administrators to dictate well, that it looks as if the trouble may center here. We need a manual on How To Dictate to a Stenographer. Perhaps we'll soon have one. One interesting point brought out: A girl can type automatically any nonsense roughed out for her on the typewriter—and she often does; but once get it into shorthand, and she's bound to read it more carefully and try to put some logic and meaning into it when transcribing it!

Typists!

We just can't get away from the subject of stenography. Now come letters from a retired supervisor who was long amazed at the terrible waste of public funds by certain minor executives who haltingly dictated their daily correspondence, and from a woman worker who says few men like to dictate any more, that typing from roughed-out copy saves time, but that good typists simply do not advance as fast as clerks. She suggests that every clerk should know how to type well. We go further. We believe everyone should know how to type rapidly and accurately, and that time now wasted trying to teach youngsters how to write legibly in school should be confined to instruction in writing their signature and in typewriting for every other purpose. Furthermore, we think a fast, accurate, logical typist, who does not automatically reproduce every stray bit of nonsense that happens to be in the copy, but who uses her head with skill, is a superior person and merits advancement. Next?

Research on peas and beans

Release No. 1924, for which write Press Service, USDA, reports on research performed on dry beans and peas, in Research and Marketing Act projects for the fiscal year, 1948-49. For details get the release.

Ribes and white pine blister rust

Research Achievement Sheet No. 98 (E) recounts work performed by scientists in Agricultural Research Administration to find an effective method of destroying currant and gooseberry plants which are alternate hosts of white pine blister rust. You will find all details in the sheet, available from ARA.

Poultry and eggs

If you are interested in poultry and egg losses in marketing channels and in the Department's dairy and poultry market news service, get hold of a copy of Marketing Activities for August—issued by Production and Marketing Administration.

World rice

The world's rice supply will probably continue short in 1949, and for a few years thereafter. Note and handle rice at weddings accordingly. Dr. J. Norman Efferson, international rice specialist of our Office of Foreign Agricultural Relations, has just made a 6-month first-hand study of the rice situation in 19 countries. You will find details in No. 1835, for which write Press Service, USDA.

Chicken-fed mink

Mink fed wastes from poultry dressing plants—heads, feet, and entrails—oblige by producing excellent fur and, what with the horses becoming a vanishing race, the horse meat hitherto so largely fed them is no longer so plentiful. The kits on the domestic mink ranches grow faster on poultry wastes than on horse meat anyway, according to work at the U. S. Fur Animal Experiment Station, Saratoga Springs, N. Y.

Painless injection

There may be some more painless method of injecting agricultural information into the indifferent public mind, but for our money "The Set of the Sails," the 1947 annual report of the Rhode Island Agricultural Extension Service, is quite satisfactory. It is Bulletin No. 118 of the Service, at Kingston, R. I., and is about as attractive and pleasant a publication of the sort as we have ever seen. Guaranteed not hurt you one bit.

Dynamiting bamboo

Digging with dynamite helps to supply planting stock of bamboo in Puerto Rico. This big grass is proving an excellent soil conserving plant there and is also of value as material for building and the making of furniture and novelties. New plantings are established by offsets from old clumps that include a piece of stem and some attached roots. But the toughly matted roots that make bamboo such a good soil holder make hard work of digging plant stock. The Federal Experiment Station at Mayaguez has found that the easier and quicker way is to blast out a clump with dynamite using about one stick to each 6 or 7 square feet of area in the clump—just enough to blow the saucer-shaped mass of roots free and clear. Then it is relatively easy to go in with a machete or axe and cut loose offsets for planting. Blasting tests saved up to three-quarters of the man-hours of work and up to half the cost.

Does your jelly jell?

If it doesn't, don't claim that's because you made it with beet instead of cane sugar. The sugars are chemically identical. One makes just as good jelly as the other. They are equally good for canning, cooking, or any other purpose. If your jelly doesn't jell maybe you just don't know how to make jelly!

Forest pest control projects

The first year following approval of the Forest Pest Control Act of 1947 witnessed the waging of the most extensive campaign against timber-destroying insects ever carried out on the National Forests, and neighboring National Park, State, and private land. For details about these insect-control projects in seven States write Press Service, USDA, and ask for No. 1912.

New tomato

This is not a piece about bobby-soxers. Moreover, collar rot is not what happens to a shirt in a laundry. The idea is to inform you that Southland, a new home-garden and market tomato, is being introduced by USDA. It is resistant to collar rot, a disease that afflicts tomatoes, and is almost immune to fusarium wilt. It was developed by our scientists at the U. S. Regional Vegetable Breeding Laboratory, Charleston, S. C., in cooperation with workers at 13 southern State agricultural experiment stations.

Watching the birdies

Four financial district bird watchers have spotted and identified 62 species of wild birds in New York City's financial district during the past 3 years. One day one of them was astonished to see an olive-backed thrush and a gray-cheeked thrush on the same tombstone in Trinity Church Yard. Then there were 40 yellowthroats at City Hall one morning, and even a yellow-cheeked grassquit from the Caribbeans turned up once. The downtown English sparrows are tough—they chase the other birds.

Copper and cow arthritis

Cattle fed on diets deficient in copper develop a disease resembling human arthritis. So Dr. George K. Davis of the Florida Agricultural Experiment Station, Gainesville, reported, at the recent Washington, D. C., meeting of the American Chemical Society. In copper-deficient areas of Florida the changes which occur in the bone metabolism of cattle are striking. Even with adequate phosphorus and calcium in the feed, and with plenty of sunlight, but with a copper content of less than 4 parts per million in the forage, Dr. Davis found that calves developed a severe malformation of the bones similar to the low-phosphorus rickets seen in other species.

FS joins big league

On September 15 we attended ceremonies held in the Washington, D. C., City Post Office in connection with the dedication of a stamp cancellation die reading: "Remember only you can prevent forest fires." Since we reckless Americans still burn a forest area equal to that of the State of Virginia each year, it is hoped that the use of this die in 37 post offices for stamp cancellation on 30 to 40 million letters daily will help in preventing forest fires. Post Office officials present remarked that the only slogans hitherto used on stamp cancellation dies concerned the Red Cross, Community Chest, and buying U. S. Bonds, so the Forest Service had thus joined the big league.

Chicks on high

Work at the Wyoming Agricultural Experiment Station discloses that chick embryos during incubation apparently attempt to compensate for the oxygen scarcity at high altitudes by increasing the amount of hemoglobin in their blood. Turkey embryos do the same thing. You wouldn't think they'd bother about such details, would you?

The will and the farmer's wife

As the saying is: Where there's a will there's relations. Making a will is of greater importance to the farmer than to the city man, yet scattered studies indicate most farmers do not make wills. If you want an interesting and useful 2-page statement on how the farmer's will should be made write (please do not phone) Helen C. Douglass, Press Service, USDA, and ask for a copy of her Food and Home Notes dated for release September 15. You'll find more detail in "Have You Made Your Will?" an article by Esther M. Coluin in August Agricultural Situation; procure from Economic Information, BAE.

Advantages of a thick skin

Dr. V. F. Tapke of Plant Industry Station, Beltsville, Md., has recently observed that wheat and barley plants produce thicker leaf cuticle when grown under severe rather than favorable conditions. That thicker skin stands them in good stead when it comes to resisting powdery mildew, a serious problem in humid regions. Scientists have long wondered why the disease did not damage plants in dry regions even when temporarily favorable conditions occurred; in humid areas mildew strikes at all times, regardless of temperature and moisture conditions. Now it has been found that, if the plants in the early stages of growth are subjected to drought or to excessive heat, the leaves develop a thicker skin the fungus is less able to penetrate. A cold spell during the early weeks of growth may also fortify plants against mildew later on.

SCS trainee program

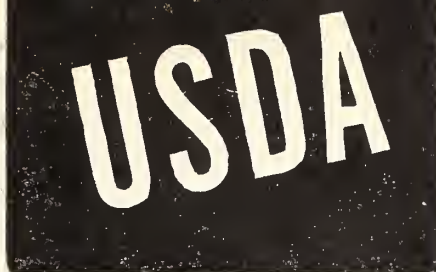
This summer Region III of the Soil Conservation Service (headquarters Milwaukee) recruited about 100 college students as trainees for professional engineer soil conservationist and soil scientist jobs. Students who had completed 2 or 3 years of college work were given competitive Civil Service examinations, before the schools closed their spring sessions. Those with the highest qualifications received probationary appointments for field work during the summer. In the fall, SCS selected those with demonstrated ability and interest in conservation work and gave them leave without pay to finish their college training. When they graduate, they will return to work with SCS and be promoted to professional jobs. Whereas only 8 to 10 percent of similar eligibles usually accept appointments, 90 percent of these did so, which is unique. Both students and SCS field staffs are enthusiastic about this program.

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FOR OCTOBER 25, 1948

Pictures replace words

AN EXHIBIT and a manual of color photographs has been produced by Livestock Branch, Production and Marketing Administration, to show the minimum requirements for beef to be graded U. S. Prime, U. S. Choice, U. S. Good, or U. S. Commercial, in accordance with Federal standards. Through the use of color photographs it is now possible to show the degree of conformation, finish, quality, and combination of these factors which have previously been expressed only in broad, and somewhat nebulous, descriptive terms. Preparation of the exhibit and the manual was carried out as a Research and Marketing Act project to assist in the interpretation and application of the Federal grades, particularly where one grade leaves off and the next one begins.

The exhibit consists of natural-color photographs of 12 beef carcasses—a lightweight, mediumweight, and heavy-weight carcass in each grade. The outside, back, and inside views of the carcasses are shown in one photograph, and the characteristics of the meat, as revealed by a cross section of the rib, are shown in another. A legend accompanying each photograph describes the characteristics of the carcass in relation to the official standards.

Only a master copy of this manual has been prepared. It contains similar photographs and legends of 39 carcasses. It is still in the developmental stage and additional photographs will be included to cover other grades, classes, and weight groups, and substitutions will be made as more representative illustrations of the respective grades are obtained. The method for duplicating the manual, the number that will be processed, and the policy with regard to its distribution have not been determined. These days even good pictures of meat have a tonic value!

Scientific publications

THE British Royal Society Scientific Information Conference was held June 21-July 2, and some results of its deliberations appeared in *Nature* (London) for August 21. Prof. J. D. Bernal headed the section on editing and distributing original scientific papers, which reached some interesting conclusions. It found, for one thing, that scientists relied for technical reading rather on libraries than on periodicals to which they subscribed. The average research worker looked through some 9 papers weekly and read 3 carefully, usually making notes and keeping a card index. In 37 percent of the cases a paper was read because of reference to it in another paper; in 18 percent, because an abstract was seen. Reprints furnished 6 percent of the general but 12 percent of the careful reading.

Of a specific 2,000 papers described as fully read in 430 different journals, one-quarter were found in 6 journals, half in 30, and the last quarter in 330! More foreign than British papers were read, and these were American in vast majority. Printing was decided upon as still the best method of reproduction, but the quality of scientific papers could and must be improved. Library effectiveness must be increased. The method, increasingly prevalent in the U. S., of asking authors to pay for the insertion of their papers in scientific journals, was recommended. Many other interesting and helpful conclusions and suggestions appear in the abstract of proceedings published by *Nature*. Get this August 21 issue for details.

Jordan retires

Thomas J. Jordan, assistant State agent in charge of agricultural extension work with Louisiana colored farmers, retired recently after 34 years' service dating back to the beginning of such work in this State. He began work on no salary, but received donations of vegetables, an occasional chicken, and funds raised at church meetings.

Research luncheon

WHEN THE Research and Marketing Act National Advisory Committee had lunch at Beltsville, September 23, the items on the menu represented USDA's scientific accomplishments in many food fields. The Committee, with Howard E. Babcock of Ithaca as chairman, advises on the administration of the act.

The luncheon opened with an apple juice cocktail prepared from concentrated McIntosh and Stayman Winesap juices, with recovered natural apple flavor essence added, compliments of the Eastern Regional Research Laboratory. The roast turkey was of the Beltsville Small White breed developed for small families by the Bureau of Animal Industry. The dehydrofrozen green peas were flown from the Western Regional Research Laboratory which developed this preserving process, and the lima beans were Peerless, a product of our plant breeders. The apple sauce was made from locally grown frozen Golden Delicious, a variety found very suitable for freezing. Some of the bread was made from Comanche and some from Red Chief wheat, to demonstrate the effects of the wheat on the baking quality of flours.

The luncheon salad was especially canned, jellied fruit chunks in which low-methoxyl pectin also developed at the Western Lab was used, and with it were served assorted cheeses provided by the Bureau of Dairy Industry, which likewise furnished a new low-cost beverage milk, and ice cream made from sweet-cream buttermilk to improve its food value. The Bureau of Human Nutrition and Home Economics made the flavorful prune cake served. Plant breeders were responsible for the fine grapes, a selection from a cross between Eastern Vervennes and California Ribier. Finally, the Southern Regional Research Laboratory thoughtfully sent some of its nutritious hard candy fortified with 5 percent of soybean protein, and its nougat containing 2 percent of food yeast for added protein and 1 percent of bonemeal to supply calcium.

Dr. Davis' exhibit

Western Farm Life for August 15 featured a readable and interesting account of a pathological exhibit on the fifth floor of Denver's New Custom House—312 tissue specimens illustrating practically all common diseases of farm animals—the prize project of Dr. Charles L. Davis, Bureau of Animal Industry pathologist stationed in that city. This highly useful educational museum is his baby, and Dr. Davis himself is a fellow of parts. Western Farm Life is published from 1520 Court Place, Denver 2. The article is on the editorial page.

Agriculture and war

PLOWSHARES INTO SWORDS, by Arthur P. Chew, Office of Information, is the latest book by a USDA author that has come to editorial attention. Priced at \$3, the book was published by Harper & Bros., with a foreword by Henry C. Taylor, first Chief of the Bureau of Agricultural Economics. It is enthusiastically recommended by Peter F. Drucker, Russell Lord, and, for that matter, the editor of *USDA*. Mr. Chew joined USDA in the days of Secretary Henry C. Wallace, and the polished urbanity and crystal clarity of his style make this strongly philosophical little book easy reading.

Its title is derived not from the familiar phrases of the prophets Micah and Isaiah, but from Prophet Joel's prescient remark: "Beat your plowshares into swords and your pruning hooks into spears." We are quite accustomed to the thesis that the industrial development of nations leads to rampant nationalism, diplomatic struggle for markets, and imperialistic wars. But Chew thinks more deeply than this. He observes and proves that the industrial development of nations which lack great arable land masses gradually places an intolerable burden upon their agriculture, and modern war is war for farms.

True, industry also mechanizes agriculture and increases its output fantastically. But despite advancing agricultural technology, top-heavy industrial development crowds out agriculture, compels the nation to import food in return for the fabricated products of its machines, and panic pervades it when that food begins to become less accessible. The book's themes are clearly stated in the initial chapter, *Modern War Is War for Farms*. These themes are developed symphonically in subsequent chapters. But the entire book, which is suggestive, illuminating, and profound, must be read with care to unfold the argument for the author's thesis. Such reading we strongly recommend.

Fooling mosquitoes

It scarcely seems fair for a professor at Cornell University Medical College to fool and kill off male mosquitoes lured to his highly scientific electrical trap by the playing of records reproducing the female's enchanting mating call—alas inaudible to human ears. He even used a loudspeaker to broadcast the mating call and the males poured in from all over. Dr. Morton C. Kahn spent many happy days playing phonograph records to mosquitoes in a Cuban swamp. Actually another promising method of battling man's disease-carrying insect foe is on the way. It may sound foolish, but rest assured it isn't.

Mobile repair shops

A NEW TYPE of on-the-farm repair service is being provided farmers in the area served by the Upshur Rural Electric Cooperative of Gilmer, Tex., a cooperative financed by the Rural Electrification Administration. This could well be an answer to the farm repair problem in any part of the Nation. Take, for example, the recent case of a young Texas farmer whose tractor had broken down. Removing the broken tractor part and getting it into town for repairs would have meant the loss of valuable time. Instead, all the farmer had to do was to make a telephone call. Within a matter of a few hours, a mobile repair trailer pulled into his yard. The first thing the repairman did was to plug his electric drill into an electrical outlet at the corner of the barn. In no time he was at work making the necessary repairs to the tractor.

This quick repair service is being provided by about 25 veterans receiving institutional on-the-farm training from the Texas vocational agriculture department. The school is located just outside of Gilmer. The program is administered through the Veterans' Administration.

As part of the very practical instruction, the veterans put together the portable repair shop from the chassis of an old milk truck. The trailer was fitted with equipment that ranged from a sturdy workbench to a stock of machine and plow bolts. Steel shelves held welding rods, a chain hoist, pipe dies; and bolted to the wall were oxygen and acetylene tanks for welding. It also had a long extension cord so that drills, grinders, and other electric tools could be hooked up to an electric outlet located on the farm's premises.

Besides doing all types of farm repair jobs, the tools help the veterans install electrically powered water systems and milking machines. Class members also do their own and others' farm wiring, using tools and materials brought directly to the farm in the trailer. From all reports, the program has been a success and has proved that a portable repair shop can provide a practical training for enterprising veterans.

Crops and soils

What's New in Crops & Soils is the new magazine published by the American Society of Agronomy, a monthly at \$3 a year. Vol. 1, No. 1, October 1948, just came to our attention. It appears from 1910 Monroe St., Madison 5, Wis., and is really an illustrated popular magazine. USDA contributors to the first issue included: O. S. Aamodt, Grover F. Brown, Walter D. Ellison, Glenn W. Burton, B. A. Krantz, and P. H. Harvey. We recommend it to your attention.

Extension pioneer passes

DR. CLARENCE B. SMITH, who retired in 1938 as Assistant Director of the Cooperative Extension Service, died September 18, at the age of 78. He served USDA for 42 years. He was one of the leading influences in the establishment of 4-H Club work. Born near Howardsville, Mich., September 21, 1870, Dr. Smith received his B. S. degree from Michigan State College in 1894, and a year later his M. S. degree. He came to USDA as an accountant in 1896. In 1898, he spent 6 months at the University of Halle and 3 at the University of Bonn, Germany. In 1899, he became editor of the Experiment Station Record. Michigan State College awarded him an honorary Doctor of Science in 1917.

Dr. Smith was coeditor with Dr. E. V. Wilcox of the *Farmer's Encyclopedia of Agriculture*, published in 1904, and the *Farmer's Encyclopedia of Livestock*, published in 1907. He took up research work in the Office of Farm Management for the Bureau of Plant Industry in 1907, and in 1909 was placed in charge of the section of that office known as Field Studies and Demonstration. He was given a leading responsibility in the organization of cooperative extension work in 1914, upon passage of the Smith-Lever Act. In 1930, he was coauthor with Meredith C. Wilson of the classic, *The Agriculture Extension System of the United States*. He received his appointment as chief of the Office of Cooperative Extension Work in 1923, and in 1932 was appointed Assistant Director of the Extension Service, which position he held until retirement.

Information about USDA

THE following *USDA* Documents, published as a service to readers of this employee house organ, are available in limited quantities. If you want more than half a dozen of any one of them we suggest you borrow our stencil to have them run or, if in the field, cut a stencil and run from a copy of the document we can supply. To procure copies on written order, address Editor of *USDA*—see masthead bottom page 4; or you may telephone Miss Arden, Ext. 4649, Room 535A. The documents are as follows, and you may order by number:

1. Origin, Structure, and Functions of the USDA (with functional organizational chart attached), August 1, 1948.
2. Abridged List of Federal Laws Applicable to Agriculture (Including Reference to Former Functions), September 1, 1948; hereafter to appear in new revision September 1 each year.

3. **Biographies of Persons in Charge of Federal Agricultural Work, 1836 to Date** (Commissioners of Patents, Superintendents of Agriculture, Commissioners of Agriculture, and Secretaries of Agriculture), June 2, 1948.

4. **Condensed History of the U. S. Department of Agriculture** (with block organization chart attached), April 15, 1948; especially useful for orientation of new employees.

5. **Our Department Scientists**—an account of some early and very notable achievements of USDA research workers in the natural sciences.

6. **Important Recent Achievements of Department of Agriculture Scientists**, October 1, 1948; hereafter to appear in new revision October 1 and March 1 each year.

Tracer technique

DISCUSSING "Radioactive Materials in Soil-Fertilizer Research" before the American Plant Food Council recently, Dr. F. W. Parker, Assistant Chief of the Bureau of Plant Industry, Soils, and Agricultural Engineering, included a non-technical explanation of the use of radioactive tracers. He said:

The reactions and properties of radioactive elements, like radio-phosphorus, differ from ordinary elements in only one respect. They give off a radiation as they disintegrate at a rate that is characteristic of the element. Ordinary phosphorus does not do this. This radioactivity makes it possible to detect or trace the radio-element wherever it may go in the soil, through the plant and in the animal.

Thus we could fertilize a soil with radio-superphosphate, grow clover, feed the clover to a cow and feed a calf on the cow's milk. After being on such a diet for a month, the calf's bones could be analyzed for total and radio-phosphorus. From the data we could calculate the amount of phosphorus in the calf's bones that came from the superphosphate. This general method is frequently called the "tracer technique" and is in general use in many fields of research.

The utility of the tracer technique depends in large measure upon the facility with which very small quantities of the radio-element can be accurately measured. The extremely small quantities measured may be illustrated by data on the preparation and use of radio-phosphorus in the season's field experiments.

Radio-phosphates, produced at Beltsville this spring, contained approximately 125 pounds of phosphoric acid. Of that quantity only 1.4 pounds came from Oak Ridge. Less than one-millionth part of the phosphorus received from Oak Ridge was radio-phosphorus. The remainder was ordinary phosphorus.

We, therefore, had less than 5 milligrams of radio-phosphorus in the 125 pounds of phosphoric acid. The 600 pounds of phosphate have been applied to about 2 acres of experimental plots. The fertilized plants will absorb less than one-tenth of the applied phosphate. Yet the radio-phosphorus can be accurately determined in 1 gram of the plant tissue at the end of the growing season. By that time 99.9 percent of the original radio-phosphate has decomposed. We measure what remains.

Foot-and-mouth

On September 17 it was announced that the foot-and-mouth quarantine had been lifted from 24,000 square miles of territory in Mexico as it had been determined to be disease-free. For more detail *write* Press Service for release No. 1977.

USDA: October 25, 1948

Brief but important

Co-ops

We may have mentioned it before, but Bertram B. Fowler's book, *The Co-Operative Challenge* (Little, Brown & Co., Boston) which appeared in 1947, is well worth looking into.

Friends of Jack Ferrall

You may be interested in a brief article about James A. Ferrall, USDA's best contributor, who retired from Plant Industry Station a while back, which appears in October Journal of Living, page 38. The magazine is published from 1819 Broadway, New York 23, and is available on newsstands at 25 cents.

Prospective farmers

Suggestions to Prospective Farmers and Sources of Information, a processed publication from Bureau of Agricultural Economics, has appeared in a new revision dated June 1948.

Thanks, Dept. Labor

It is rather rare for one executive Department to feature the work of another. But Labor Information Bulletin for September featured some of USDA's pointers on how to beat the H. C. L. in a 2-page illustrated spread. Our Beltsville home economists were pictured dealing with ear corn.

New forester develops

Yearbook editor Alfred Stefferud returned recently from an extensive sojourn in our National Forests to get background for the 1949 Yearbook on Trees. He was mentally and spiritually changed—a forester at heart. Some of the other agencies would now like to know more about FS slick technique for producing such sure-fire results.

Mexican canned meat

The USDA has contracted to purchase 133,-200,000 pounds of Mexican canned meat products for export to foreign countries during this fiscal year. For details *write* Press Service, USDA, and ask for No. 2024.

New inspection offices

Destination inspection offices for fresh fruits and vegetables have been established at Charlotte, N. C., with Luther J. Pollock in charge, and at Birmingham, Ala., with Harry L. Notter as inspection officer.

Tree breeding

A new illustrated publication on Tree Breeding at the Institute of Forest Genetics, Miscellaneous Publication No. 659, might be of interest to you.

Big pig crop asked

A record peacetime spring goal of 60 million pigs has been urged upon farmers for 1949. For more detail *write* Press Service for No. 1975.

Electrical leaflets

Certain two-page leaflets issued by Rural Electrification Administration appear to us to be not only readable and self-instructive, but potentially valuable to many who perhaps do not know about them. For instance these: Care and Use of Your Small Electric Appliances; Electric Pig Brooders Easily Made from Scrap Lumber; Make This Motor Table; and More Power to Your Dairying. Procure directly by request to REA.

Buying and keeping eggs

You will find a wealth of information on where and how to buy and to keep eggs in Press Release No. 2031, called "Consumer Guides for Buying and Keeping Eggs." To get it *write* Press Service, USDA.

Missouri shows you

In case you don't know, The Missouri Conservationist, issued by the Missouri Conservation Commission in Jefferson City, is an interesting well-illustrated monthly covering wildlife and conservation generally. The pictures of wildlife are especially fine. Address Dan Saults, information chief of the Commission, if you want to see a copy.

Lumber and crutches

A leaflet from Forest Service Region 3 tells of a pine tree recently cut out that way which stood 110 feet tall and had a diameter of 61 inches, and of a Gamble oak 84 feet in height with a diameter of 59 inches. The leaflet coyly winds up: "It takes 25 manufacturing plants to supply the crutches needed in the USA"—an obvious be-careful hint.

Plastic roads

Dr. Hans F. Winterkorn, of Princeton, recently told the American Chemical Society that low-cost plastic rural roads may soon become possible. Surfaces as strong and as durable as concrete would be produced by chemical treatments of the soil using techniques employed in building airfields during the war. Thus good roads might be possible through the use of plastics.

Chiggerless for life

Research by USDA scientists during the war produced as a byproduct the ability to make peacetime clothing chiggerproof for life. Two organic compounds—or, if you must roll their names about on your tongue, they are phenyl carbonate and x, x'-dichlorodiphenyl ether—can be used to impregnate the cloth from which garments are made, and they will remain deadly to chiggers through 7 launderings, if the clothing survives!

New farm created

Experts in soil conservation recently went out and transformed a nearby Maryland farm in a single day. This was but one example of many. On September 18 the 850-acre farm of John Race, 14 miles from Denver, underwent a similar miracle, with different procedures adapted to dry-land, irrigation, and range agriculture. The project was under the general supervision of Soil Conservation Service and Colorado A & M College. Dr. Hugh H. Bennett was on hand to help his field men explain the work being done. The New York Times for September 19 carried quite a story of this demonstration.

Product standardization

The work of the Processed Products Standardization and Inspection Division, Production and Marketing Administration, is essentially self-supporting because many small fees add up to more than a million dollars a year. Inspection is conducted in the plants by USDA-trained inspectors, or in USDA laboratories using samples submitted by the plants. The quality of products is precisely determined by the use of color charts, scales, mechanical devices, and chemical analyses. Intensive research and cooperation with food producers and packers for a long period has determined the features that make food appetizing in flavor and appearance. New grade standards are appearing continuously—the latest for canned fruit jellies, olive oil, dried dates, and frozen grapefruit.

Nutrition conference

Dr. Hazel H. Stiebeling, Chief of the Bureau of Human Nutrition and Home Economics, was a U. S. delegate to the Latin-American Nutrition Conference, held in Montevideo, Uruguay, July 18-28. The major work of the conference was conducted in committees which studied specific problems and framed 73 recommendations to guide governments, private institutions, and individuals in initiating and carrying out sound nutritional policies. This was the second regional FAO meeting to consider such problems, the first having been held in Baguio, Philippines, to plan a development program for East Asia.

Busy on bugs

It appears very much as if James A. Hyslop has been quite busy since he retired from Bureau of Entomology and Plant Quarantine 4 years ago. Seems he has completed his Encyclopedia of Economic Insects, begun 27 years ago, and the manuscript covers 75 feet of shelf space. It would take two volumes of approximately 900 pages each, priced around \$15, to hold this material in print, in case you know some publisher who would like to save working entomologists a lot of time. Reputed to extend from *Abacarus hystrix* to *Zygogramma exclamatoris*, it lists some 30,000 known U. S. insects, condensing and cross-referencing material on them from some 37,000 sources. Here's an ex-Government official with a really useful and important book to sell, but he's having a mite of trouble selling it.

Merchandising course

Reductions in spoilage and waste in the marketing of fresh fruits and vegetables, larger sales, and better quality produce for the consumer are being reported as a result of an experimental training program for retailers conducted under the Research and Marketing Act. The classes are being given by the United Fresh Fruit and Vegetable Association, under contract with USDA. Since November 1917, when the program started, about 630 classes have been held in which more than 5,200 persons in the retail trade in 34 cities have participated. For more detail write Press Service, USDA, for No. 2034.

Pollen by plane

About 10 years ago our plant explorers brought from Burma a wild sugarcane that automatically shed its lower leaves and leaf sheaths, a self-cleaning process Dr. E. W. Brandes, in charge of sugar investigations, much admired. But crossing with an improved variety in Florida proved difficult, because the Burma cane bloomed sparsely and too early for mating with the other desirable plant varieties. But, with the assistance of scientists in Puerto Rico and in Colombia, and transport of desirable pollen from fields in the former to those in the latter by airplane, Dr. George Sartoris of USDA made the desirable crosses personally in 4 days, and within less than 6 weeks the Department had seeds from the hybrid cane.

In-service in SCS

For some years Soil Conservation Service has participated in an in-service training program sponsored by the Interdepartmental Committee on Scientific and Cultural Cooperation of the Department of State. It has so far trained 79 Latin-American technicians and 58 from other continents. Each trainee completed 1 year of "work while learning," many of them 2 to 4 years ago, whereupon they returned to their homelands and were rapidly promoted in the direction of native soil conservation programs. The Service is proud of these trainees and of the records they have made. Today it is still training technicians from all over the earth, each country bearing all or most of the costs incurred by its trainees while engaged in the program here.

George Marvin

George Marvin, county agent for the northern district of the Island of Hawaii for 13 years, died suddenly August 21, at the age of 50. A graduate of University of Wisconsin, he taught economic entomology there from 1925 until 1931, when he entered our Bureau of Entomology to remain until he went to Hawaii. He was a specialist in bee management and an unusually active and progressive county agent.

Credit Unions

Secretary (Mrs.) Allene G. Dabulewicz of the Tri-Ag Federal Credit Union, Upper Darby, Pa., writes that it serves employees of the Northeast Forest Service Experiment Station, the local branch of the Library, and the Northeast Regional Office of Soil Conservation Service. There is also a Credit Union at Eastern Regional Research Laboratory, Wyndmoor, Philadelphia 18, Pa. We are glad to see the field also has its unions.

Disease-resistant elm

During 1950 it is hoped that a thousand cuttings can be distributed of an elm selected in Europe by the Dutch scientist, Christine Buisman—and named for her—which extensive tests have shown to be resistant to both Dutch elm disease and elm phloem necrosis. The USDA also has thousands of elm hybrids and selections under study in its elm-disease research laboratory at Columbus, Ohio, and in New Jersey and Missouri field stations. Of these, 14 American selections show promise but will not be released until further tests are made.

Rubber work

E. W. Brandes has relinquished his responsibilities as head of the Division of Rubber Plant Investigations, Plant Industry Station, Beltsville, Md., to give full time to the Division of Sugar Plant Investigations which he has long headed there. He has headed both divisions since 1940. Robert D. Rands, principal pathologist in charge of the cooperative Latin-American rubber-development project, succeeded Dr. Brandes as head of the Rubber Division which, since 1947, has continued research phases of the wartime domestic rubber-production projects in the Southwest.

Grade B eggs

For scrambling and general cooking uses the thrifty housewife can always ease her budget by buying Grade B eggs. Grade AA and A eggs have a large proportion of firm white which stands up well around the yolk, itself round and upstanding. Eggs of lower quality have a smaller proportion of thick and a greater of thin white; when broken, their whites spread out more and their yolks are less round and break more easily. But, except for poaching, frying, and cooking in water, they are just as good as their more aristocratic competitors.

Off with their horns!

Probably few of you city folk are aware that dairy cattle herd owners are ganging up on the cow's horns as a last remnant of barbarism. Says J. M. Eleazer, the gentleman from South Carolina, "If there ever was a useless and dangerous thing it is the sharp cow horn on an animal that we have tamed from the wild." Says he the horns serve no useful purpose; off with 'em! Leading dairy breeders in his State have agreed to end the hazard by killing the young horns on all their calves. Then cows will look even more docile and bulls less choleric. In case you are keeping cows in your apartment your county agent—he's in your city, never fear—will tell you how to deborn them as calves.

Black Hills celebrates

There was quite a celebration in honor of the fiftieth anniversary of the Black Hills National Forest—one of the earliest—created February 22, 1897, by proclamation of President Cleveland. Further acreage was added by proclamation of President McKinley a year later. Forest Service issued an informative booklet on Black Hills National Forest—50th Anniversary, in September.

Hostess group

The USDA Hostess Group is 1 year old. While its previous activities have been largely recreational, it now asks young women 18 to 30 (there are no women over 30, are there?) to join its Hospital Hostess Group to take part in hospital parties and dances at veterans' hospitals and nearby camps. A big fall and winter program impend. If interested, call Mrs. Havey, Ext. 6229. Are you field people doing anything like this?

Cotton sampler

The British Cotton Industry Research Association, Shirley Institute, Didsbury, Manchester, recently announced and described a Shirley Analyzer which precisely indicates the quantity of lint contained in raw cotton or waste by completely separating the lint in a sample from the trash. It uses the principle of buoyancy. Raw cotton is fed in and opened up to release the trash—stalk, leafy material, seed coat, dust, which may run as high as 5 percent. It is then released into a uniform, eddyless, controlled air stream through which the relatively heavy trash falls into a tray, while the more buoyant fibers are carried on by the stream and collected in a rotating perforated drum by aid of a fan. Finer dust particles are exhausted by the air. Cotton and trash are separately weighed. The machine can likewise be used to find out whether spinning machines require adjustment to reduce the loss of good cotton fiber.

As seen by a Britisher

During the past year, British J. A. R. Pimlott has been studying U. S. information work under a grant from the Commonwealth Fund. He is a former personal assistant to Herbert Morrison, Lord President of the Council, in which capacity he was concerned with British Government information activities. In a recent discussion with USDA information people, Pimlott dropped a few observations of rather general interest: Probably because of the preponderance of newspaper background U. S. Government information people take insufficient interest in research—in measuring results . . . we put more emphasis on press relations than on other media. With exception of USDA, our Government makes little use of exhibits. We use radio more than Britain because of greater number of stations here. The British Government sends out paid lecturers on economics and other subjects—a plan used little if at all in the United States. British theaters use more Government films than ours. Pimlott was interested in our occasional use of humor of the type in "Smokey Bear" forest fire prevention cartoons—thinks we might do more of that. He commented on the relative absence of field information offices in a country as big as the United States.

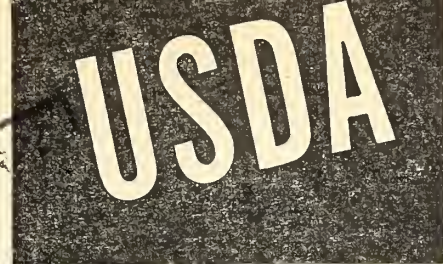
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Correspondence should be addressed to T. Swann Harding, Editor of USDA, Office of Information, Department of Agriculture, Washington 25, D. C. Washington or field employees, please write instead of phoning.



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FOR NOVEMBER 8, 1948

Cotton and its rivals

ROBERT B. EVANS, of the Southern Regional Research Laboratory, New Orleans, addressed the Fifth Spinner-Breeder Conference in September on Cotton's Increasing Competition from Synthetic Fibers and Paper. He addressed himself finally to the question: What should we do to improve cotton's competitive standing?

First, we should see to it that cotton has a competitive price. By more widespread use of mechanical methods, cotton can be grown at a cost per pound far under that of producing any synthetic fiber. This advantage should be capitalized. Second, there should be more diversity in types of cotton produced. Synthetic fibers are often tailored to specific uses. Hence high-strength cottons should be featured for such uses as tire cord, and cottons with luster and softness for dress shirts and women's apparel. We need domestic cottons to replace imported long-staple varieties used in thread and fine textiles, while a very coarse medium-staple cotton would be valuable for carpets, upholstery fabrics, and filter cloths where resiliency counts.

Third, we should increase our scientific knowledge of the relationship between the properties of raw cotton and the characteristics desired by consumers in end-use products. We need to know much more about how different varieties contribute to luster, draping qualities, and resistance to creasing, to abrasion, and to soiling, for instance. Basic research is required here. Again, whereas most synthetic fibers arrive at their destinations in neat well-covered bales, cotton is still the worst-packaged material in commerce! Finally, there should be united, adequate support throughout the cotton industry for the research and merchandising agencies engaged in promoting the use of cotton—just as now exists in the synthetic fiber industries.

Tree Breeding

THE BREEDING of faster-growing forest trees which are also good lumber producers is a slow but can be an immensely profitable project. Forest Service is carrying on such work in its Institute of Forest Genetics, a field laboratory operated by its California Forest and Range Experiment Station. The Institute has an interesting history. It sprang from mental cross-breeding between James G. Eddy, a Seattle lumberman, and Luther Burbank.

The Eddy Tree Breeding Station began life on a 106-acre tract near Placerville, Calif. ("Hangtown" in Gold Rush days), in 1925, and soon 70 of the approximately 90 pine species in the world were planted in its arboretum, a research staff was assembled, and hybridizing began. Funds supplied by Mr. Eddy, the Carnegie Institution of Washington, and the Soil Erosion Service kept the station alive during the depression. In 1935 it was acquired by FS as a gift. The pines were chosen for extensive work, and many promising crosses have been made.

While some 2,500 crosses would be possible, only a dozen or so new ones are tried each season. Many of them, including those between the Coulter and the Jeffrey pine and between western and eastern white pine, look especially interesting. The hybrids exhibit increased vigor and growth rate, and some of them are expected to mature 30 to 40 years sooner than regular saw-timber pines. Hybrid plantations are planned and related research will be done on seed, the effects of elevation, cuttings, grafting, and pollen storage. This is slow work for the patient man but the long-term outlook is promising.

Organization charts

We have a few block and functional charts of the Department's organization. Write the editor of *USDA* or phone Miss Arden, Ext. 4649 for copies; specify block or functional.

An ACP demonstration

EXTENSION SERVICE through its county agents and specialists brings conservation information to farmers. Forest Service protects large areas of timber and watersheds, and reduces flood damage. Soil Conservation Service offers technical assistance in conservation districts. The Agricultural Conservation Program enables farmers to apply conservation practices and at least one such practice is today being carried out under it on half of the Nation's farms. Like SCS, the ACP every now and then steps in and quickly transforms an eroded farm.

On September 30 and October 1 last it picked out for this purpose the farm of William and David Parks, veterans, near Greensburg, Pa., a rather run-down holding purchased with a GI bill-of-rights loan plus extra funds from Farmers Home Administration. The vets had acquired on-the-farm training, hence could profit by this living lesson in conservation. Once again there came a revelation of what American skill, ingenuity, and progressiveness can accomplish when a community volunteers.

This demonstration was sponsored by the Pennsylvania State Production and Marketing Committee and three nearby county agricultural conservation committees. SCS prepared the revised land use map, more than 70 commercial concerns provided equipment and aid, and groups of trainees turned up for instruction in constructing diversion terraces, using levels to establish contours, operation of earth-moving equipment, and pond excavation.

Contour strips were plowed for fall grain, limed, and seeded. Permanent pasture was established, hay land top-dressed. Much new fencing was erected, about 2,500 feet of diversion ditch were constructed, trees planted, a farm pond dug, tile-drain put in, sod waterways established, borders developed, and contour-strip boundaries plowed in. Secretary Brannan spoke at a banquet attended by 800, and 25,000 people watched the demonstration from a vantage point which overlooked practically the entire farm.

Books—articles

When a book or an article is mentioned in *USDA* some readers always write in on the assumption that the editor has vast hoards of books and magazines to pass out free. Others ask where they can get books or magazines. We naively assumed that our readers knew: Books and popular magazines are available from bookstores, newsstands, libraries, or the nearest unit of the USDA Library. How wrong we are, though.

Your office home

A YEAR OR SO AGO there died suddenly a very fine gentleman who worked in the New York offices of the Commodity Exchange Authority. His own office was always immaculate. He attended to that on Saturday mornings, pretending that to stay home would merely involve him in disputes which he always lost because his family consisted of his wife, three daughters, and two female canines. They consistently outvoted him and he had no veto. But that was pretense. Actually he felt that his office interpreted him to other people; therefore it must be immaculate. Not satisfied with the work of the cleaning force, he himself polished and waxed his desk, the chairs, the table, the bookcases, and the linoleum on the floor. All brass and other metal in the room shone; picture frames and glasses were sparkling; the entire room was always in order.

For this USDA official regarded his office as highly as he did his home. Indeed it was his official home and he knew that outside visitors judged the entire Department of Agriculture by his own deportment and by the appearance of his office. Whether you work in Washington or in the field, in a building owned by the Department or in leased or rented quarters, your office home is your responsibility. You are its custodian. You should deport yourself there as you would in your own home.

You do not like nor do you permit promiscuous accumulations of trash, old newspapers, and dirt in your own home. You maintain floors, walls, furniture, and bathrooms in a cleanly and an orderly manner. You should do precisely the same in your office home which merits the same conduct you display in your own home. *Keep your offices and buildings clean! You are their custodians!* Don't expect an overworked and undermanned cleaning force to do everything. You can only render superlative public service in a clean and orderly office which interprets you to the public as a careful, courteous, intelligent, and cultured individual.

What is "your thought"?

The distinction between information and public relations was brought up recently by Cliff Stratton of the Topeka Daily Capital and other Capper publications, in a talk before information people in USDA at Washington, D. C. Cliff thinks it a legitimate function of Government to furnish "information" to the people, but he regards "public relations" and "propaganda" as things quite apart from "information." What we'd like are your definitions—which is which and why? How would you define them?

New light on genes

THE OLD BATTLE between environment and heredity as the principal determinant of an organism's basic characteristics went another round at the recent meeting of the American Association for the Advancement of Science in Washington, D. C. Prof. Tracy Sonnerborn, a University of Indiana zoologist and also newly elected president of the Genetics Society of America, presented evidence calling for a subtle modification of the Mendelian theory of inheritance, though it decidedly did not undermine the gene system.

Working with certain strains of paramedium, Professor Sonnerborn found that some of them produced a substance which was deadly to other sensitive strains of the same one-celled organism. This killer ability depended in part on an hereditary factor which was not in the cell nucleus but rather in the cell area outside the nucleus. The inheritance could also be affected by X-rays, temperature, and other environmental conditions. Thus killer strains could be transformed into sensitive strains, and each could pass on its special characteristics to succeeding generations via inheritance.

This finding, if substantiated, will somewhat modify the classic view of the gene as the sole determinant of hereditary characteristics. It gives genetics a new concept. It provides a striking example of an organism being changed by its environment and proving capable of transmitting that change to succeeding generations. It does not, however, reestablish Lamarckianism as some over-enthusiasts at first claimed. It does prove that changes in environment cause all changes in structure and function of plants and animals which are transmitted hereditarily.

Do you feel like a dope?

If you do, it may console you to know that the August American Journal of Psychiatry contains an article showing that lack of the vitamin B complex in the diet can produce mental abnormality in 2 years, even if the deficiency is not drastic. The work was done on men patients at the State Hospital in Egin, Ill. Decline in mental ability often did not occur until the subject had been 18 months on the slightly deficient diet. Then men who had been moving about, talking, working actively in the ward, lost interest and ambition, became dull and disinterested, and sat in their chairs or lay on their beds all day. Reduction of the vitamin B in the diet to about one-third of normal produced these results, but dramatic recovery followed increase in the allowance. One patient developed a terrible temper on a deficient diet and wanted to break up the furniture. More vitamins cured him. What they might do for you or me there just is no telling.

Brief but important

Making movies

Visual Information Section, Soil Conservation Service, has issued a lively and informative mimeograph on movie-making entitled "Let's Make a Movie." If that happens to be what you want to do we suggest that you get this exceedingly informative 10-page mimeograph from SCS.

New farm publication

A new farm publication, "The Farm Builder," is scheduled to appear in January 1949, with a planned initial circulation of 600,000. It will be distributed to the Nation's farmers by the building-supply dealers. For more details write Miss M. F. Robinson, Editor, Agricultural Associates Inc., 25 Elm Street, Ardley, N. Y. The Johns-Mansville Corp. backs the publication.

American Standards Ass'n.

Secretary's Memorandum No. 1230, September 24, names the persons who represented USDA on the Standards Council of the American Standards Association and designates them as a committee to consider matters relating to standards which may concern the Department. For details procure the Memorandum from Secretary's Records Section, Room 134W, Ext. 337, by mail or phone.

"Bill Scott" on radio

On October 19 the Forest Service, in cooperation with the New York City Board of Education, began production of a new series of six conservation radio programs entitled "Bill Scott—Forest Ranger." A similar series was broadcast in 1946. The programs are produced by student actors in New York City's Public School Radio Work Shop.

Milk and cirrhosis

Work reported by Edward J. Thacker of the United States Plant, Soil, and Nutrition Laboratory, at Ithaca, N. Y., indicates that an exclusive diet of milk can cause gin-drinker's liver in rabbits and guinea pigs. Milk apparently lacks something that protects the liver against tissue break-down, so the degenerative fibrous and fatty growth which constitutes cirrhosis gets under way. The substitution of dehydrated alfalfa for half the milk in the diet prevents this. Will rum-hounds now switch to—alfalfa?

Smallest mammal

Shrews, which resemble mice—but are not rodents—have to eat practically all the time. If kept without food for even a few hours they may die. Fortunately they are fierce carnivores and devour insects, mice, or one another with complaisant relish and lack of discrimination. Oliver P. Pearson of the University of California has calculated that the smallest possible mammal—not as yet known to exist—would weigh about 2½ grams or one-twelfth of an ounce. If it were any smaller it simply could not eat fast enough to keep alive and maintain body heat.

Food losses

The Food and Agriculture Organization estimated some time ago that under adverse and unsatisfactory conditions the annual loss of grain, pulses, and oilseeds caused by insects, rodents, and mold fungi might be as high as 10 percent. If the food production of the world suffers such a loss, and there is much reason to think that it does, this equals 72 million short tons annually—or just about the quantity of these foodstuffs that enter world trade.

George M. Richards

Mr. Richards, assistant budget officer of Farmers Home Administration, died in Washington October 4 at the age of 46. He had been with the Department since 1945.

Artist Spaven

Jack Spaven, Vermont Extension Editor, is an authentic oil painter whose creations have been exhibited in the same show with those of nationally famed American artists.

In Sol.

William E. Atterbury, Office of Solicitor, transferred to the Alien Property Division, Department of Justice, early in October. Albert H. Cotton, also of Sol., resigned to accept a year's fellowship at Yale Law School for research in farm tenancy.

A. J. Patch

Mr. Patch, assistant extension editor to J. E. McClintock at Ohio State, died suddenly in late September, aged 56, while apparently in good health. A native of Michigan and a graduate of Michigan State, he first engaged in farming, then was assistant extension editor in Michigan until January 1, 1936, when he came to Ohio State.

Emsweller wins award

Dr. S. L. Emsweller of Plant Industry Station has received the Leonard H. Vaughn Memorial Research Award of \$500 for his paper reporting on his tetraploid Easter lilies, produced by treating selected clones with the poisonous drug of vegetable origin, colchicine. The new lilies have thicker petals and their flowers are from one-fourth to two-thirds larger than those of the parent plants.

Ambler dies

Dr. Joseph Ambler, long an employee of the Bureau of Agricultural and Industrial Chemistry and its predecessors, died suddenly the morning of October 6, in New Orleans, at the age of 59. He worked all day the 5th but had suffered coronary trouble for some time. Since going to the Southern Regional Research Laboratory in 1943 he has played a major part in research leading to commercial recovery of aconitic acid from sugarcane wastes.

Magruder succeeds Bratley

Roy Magruder, who since 1931 has been a principal horticulturist in the Bureau of Plant Industry, Soils, and Agricultural Engineering, has succeeded the late Dr. Cyril O. Bratley as Assistant to the Administrator of the Research and Marketing Act in matters dealing with fruits, vegetables, and tree nuts. From 1923 until 1931 he was assistant horticulturist at Ohio Agricultural Experiment Station. He received his bachelor of science from Purdue in 1922 and his doctor's degree from Cornell in 1931.

New Dairy Branch head

The new Director of the Dairy Branch, Production and Marketing Administration, is Philip E. Nelson. Herbert L. Forest, who has been serving as Acting Director, continued as Assistant Director. A native of Wisconsin, reared on a dairy farm, Mr. Nelson with his father established a dairy farm in Maple, Wis., right after World War I. This is still his home. He later organized a co-op cheese factory and helped establish the Twin Points Cooperative Dairy Association at Duluth, Minn., and Superior, Wis., and for a time served as its director. He was for 16 years in the Wisconsin State Senate and recently served as Chief of the Industrial Products Division, Office of Small Business, Department of Commerce.

Ora S. Fisher

Mr. Fisher retired recently after 33 years of service in USDA as extension agronomist, having been brought into Extension Service on July 11, 1916, by Dr. C. B. Smith. Few workers have retired with a finer or more active record of putting scientific principles into practice. His outstanding contribution was in the national and international organizations of growers producing adequate stocks of improved seed through multiplication of certified stocks from experiment stations and private breeders.

MacKellar retires

Dr. William M. MacKellar, veterinarian in charge of Bureau of Animal Industry's Interstate Inspection Division, retired in September. He entered BAI's Tick Eradication Division in 1922, and did outstanding work there, becoming its chief in 1933. He also directed work on the control of hog cholera and, since 1933, had been in charge of inspection and control of interstate livestock movements. Dr. MacKellar graduated from the New York College of Veterinary Surgeons in the class of 1899.

Dr. Raper, again to Japan

Dr. Arthur F. Raper of BAE, Division of Farm Population and Rural Life, left Washington October 20 for another assignment of work with the Army in Japan. His services as adviser to the Supreme Commander of the Allied Powers in Tokyo were requested in a letter to Secretary of Agriculture Charles F. Brannan, by Secretary of the Army Kenneth C. Royall. He will be assigned "on loan" to General MacArthur's Economic and Scientific Section, for about 3 months, to study the social and economic structure of Japanese farm villages as affected by the agrarian reform program. This is a continuation of work already started by Dr. Raper, who spent 2 months in Japan last year.

John Asking, indexer

One high light of the Graduate School Indexing Course this fall was a lecture by John Asking, index connoisseur from New York. Mr. Asking is index consultant to the Americana Encyclopedia, the Grolier Society, Doubleday & Co., Inc., and index editor of the 1947 Information Please Almanac. At present he is engaged in indexing the French edition of the Book of Knowledge in 20 volumes. Convinced that indexing is actually a fascinating craft which can become an art if properly approached, he is doing much to bring this scholarly profession to the high esteem in the United States in which the British Record Society (formerly the Index Society) is held in England.

Herrick's passing

A few days after his announced retirement Dr. Horace T. Herrick, one of the Nation's leading authorities on the industrial utilization of agricultural commodities and, since January 1, 1946, special assistant to the Chief of the Bureau of Agricultural and Industrial Chemistry, died October 7, aged 61. He had been connected with the Department nearly a quarter of a century. In 1938-42 he was assistant chief of his bureau in charge of planning, constructing, and staffing the four Regional Research Laboratories, and from 1942 until 1946 he was Director of the Northern Lab at Peoria. Born in Brooklyn, he was the son of the telegraph editor of the New York World and a nephew of Albert Payson Terhune. His mother was a writer and author. He was educated at Princeton and Columbia and was an inspiring leader, a man of great industry and tremendous activity.

Dr. Otis A. Pope

One of our outstanding leaders in experimental design, and analysis and interpretation of research results, Dr. Otis A. Pope, biometrician in Office of Foreign Agricultural Relations, died September 28, 1948. Much of the cotton research work at the Arkansas and Tennessee stations and later of the Division of Cotton and Other Fiber Crops and Diseases of Bureau of Plant Industry, Soils, and Agricultural Engineering has felt the benefit of his guidance. For the last 3 years he had been engaged in guiding and training technicians in the other American Republics in efficient agricultural research procedures as a part of the USDA program to stimulate production of many commodities that we consume in the United States, but do not produce in sufficiency.

Appreciation to Annand

Dr. P. N. Annand, Chief of the Bureau of Entomology and Plant Quarantine, has been presented a Citation by National Defense, signed by Secretary Robert P. Patterson and Secretary James Forrestal, which reads "The War Department and the Navy Department express to Percy N. Annand their appreciation for an outstanding contribution to the work of the Office of Scientific Research and Development during World War II." It was under the leadership and direction of Dr. Annand, during the war period, that the many new methods of insect control were developed and made available to the armed services for the protection of the health of military personnel by entomologists and other scientists of the Bureau of Entomology and Plant Quarantine. These developments are now making history in better living for all of us in time of peace.

Commercial fertilizers and soils

Good soil tilth results from the activities of soil organisms which require organic food; hence the soil's organic content must be maintained. Nor will minerals substitute for organic matter, though they are essential to the proper growth of both organisms and crops and, if lacking, should be supplied via commercial fertilizers, or in organic materials which contain them in available form. Commercial fertilizers and lime rarely harm soil structure. They may benefit it indirectly by stimulating the production of more organic matter or by increasing the activity of soil organisms. *The chief cause of soil decline is loss of organic matter.*

Hospitalization plan

The Department of Agriculture Beneficial Association (Room 2944, South Building, USDA, Washington 25, D. C.) which has long provided group life insurance for us, now offers a group hospital and surgical insurance plan. It provides a maximum of \$5 for each hospital-day confinement not exceeding 40 days, and surgical benefits up to \$150. Certain allowances are also available for maternity cases, ambulance service, and contagious diseases. The cost: \$1.15 monthly for single employees, \$3.35 for an employee and one dependent, and \$4.60 for an employee and two or more dependents. For further information write the Association at above address. The Association also has funds available for conservative first trust real-estate loans.

MANAGEMENT

The Management Improvement and Manpower Utilization Program has been reorganized and its objectives redefined. The Secretary has signed the program's new charter.

Japan's natural resources

The lead article in *Science* for October 8 was entitled "Natural Resources Problems in Japan," and was prepared by Lt. Col. Hubert G. Schenck, Chief Natural Resources Section for SCAP.

UNESCO

The National Commission of UNESCO held its annual meeting in Boston recently and Milton S. Eisenhower was reelected its chairman. He will be a member of the United States delegation to the world meeting in Beirut, Syria, during November.

Heed the happy moron

We are inspired by the discovery of Dr. Ruby J. R. Kennedy, sociologist at Connecticut College, that the mean salary earned by male morons (I. Q. 50-60) is slightly higher than that earned by their intellectual superiors. There is hope for all of us.

Scrap metal drive

The Department of Commerce is sponsoring a scrap drive in which our Secretary has requested USDA participation. With scrap bringing the highest price in history and steel production at record heights, it will pay farm people to gather up and sell any scrap they may still have lying around.

Cows sans horns

Whereas horns have long meant a great deal—undoubtedly too much—for show cows, the British, like some Americans, want to do away with them, the cow no longer having to protect her young from wild animals. The British are selecting breeding stock all over the world from which to develop naturally hornless cattle. Dr. A. L. Hagedoorn is in charge of this project which, it is hoped, will result in purebred hornless animals.

Better writing

Better writing is simpler writing. It takes more time because the simpler things are deceptively hard to do. Simplified English is not illiterate or first-grade English. It is easy to read, but it is not easy to write. To write English that is easy to read you have to know what makes reading difficult. If you get a chance, look over the editorial on Readability vs. Time and Space in the *Quill* for October, published from 35 East Wacker Drive, Chicago, Ill.

Overhead wealth

Specialists of the Food and Agriculture Organization have calculated that, at current rates for nitrogen fertilizers, the reserve of nitrogen in the air over every acre of earth is worth approximately 8 million dollars and weighs about 35,000 tons. The job is to capitalize on that wealth. To do that the farmer has to go into partnership with legumes which, having gone into partnership with nitrogen-fixing bacteria, manage to make direct use of this huge nitrogen reserve. The method is not rapid, but it's practical.

Fat salvage

Recent improvement in the general fats and oils supply situation has called for modification in the scope and intensity of campaign operations. The Industry Fat Salvage Committee will gradually reduce its active promotion of fat salvage. But it is anticipated that millions of thrifty housewives who have found this a convenient and profitable way to dispose of waste fat will continue to save it and that many retail stores will continue to receive and pay for salvaged fats.

Potatoes

Don't miss "The Potato—A Leading World Food Crop," in *Foreign Agriculture* (Office of Foreign Agricultural Relations, USDA,) for October. The article is by Dr. Frederick J. Stevenson, the potato and genetics expert at Plant Industry Station. It is only unfortunate that you cannot hear him deliver his vivid lecture, "Potatoes Are Like People," in his own inimitable way.

Conservation

Those of you with access to libraries should, if interested in conservation, look up the story by Frederick Sink in the *New York Herald Tribune* for October 10, entitled "Science Raises a Farm's Value 100% in One Day," a follow-up on a conservation demonstration carried on a year ago on two Ohio farms. See also the story in the same newspaper for October 11 by Bernard DeVoto entitled "Conservation and the Coming Crisis," which admirably covers the American Conference on Conservation of Renewable Natural Resources, held in Denver September 7 to 20.

Ye ignorant ed

The editor rarely attends a meeting without someone walking up to him to say: "I see *USDA* hasn't said a word about so and so," or "You have an item coming up on such and such, don't you, in *USDA*?" Well, 9 times out of 10 we knew nothing about this before at all. Yet we welcome, even plead, for contributions. If you hear about something that should be noted in *USDA* please be the reporter yourself and write the editor about it. Likely as not he doesn't know what you know well. He's really an awfully ignorant fellow.

Correct quotation

Did Shakespeare say *paint* the lily or *gild* refined gold, or the reverse, or what did he say? Is "a poor thing, but my own," correct? Is your courage supposed to be screwed to the sticking-point? Well, H. W. Fowler says "Screw your courage to the sticking-place" and "An ill-favoured thing, sir, but mine own." In fact Fowler says plenty. See his *Modern English Usage* for more detail, and send us your pet peeve on misquotations. Remember too that Fowler avers it is almost pedantry to use the true form of a quotation from a little-read author when the wrong form is well established!

Hybrid corn and a mule

Writing in *Farmers' Bulletin* No. 1744, "The What and How of Hybrid Corn," Frederick D. Richey, when Chief of the Bureau of Plant Industry, said: "Possibly the simplest way to give a general idea of what hybrid corn is, is to compare it to the mule. A corn hybrid, in fact, has many things in common with the mule. A mule is the first-generation hybrid between the mare and the ass, and partakes of the better qualities of both parents. It does not reproduce, but must be produced anew each generation for its value in itself, not for reproduction. A corn hybrid is the first-generation hybrid between two strains of corn. Its value is for seed in the production of a crop of commercial corn. This corn will grow, but cannot be used for seed without a loss in yield in the succeeding generations. A corn hybrid, then, like the mule, must be produced anew each generation for its value in itself, not for reproduction. During that generation good hybrids produce larger acre yields of high-quality corn than do the best commercial varieties. Finally, neither all mules nor all corn hybrids are efficient."

Cornell dedicates

On October 7 Cornell's new 2-million-dollar laboratory for atom research was dedicated. The lab will concern itself largely with the nature of the atomic nucleus, using a powerful postwar atom-smasher, a synchrotron, which accelerates a herd of electrons around a hollow doughnut-shaped tube until they attain nearly the speed of light, whereupon they are slammed into a nucleus to smash it. Maybe Cornell will thus be making mesons, the curious particles that appear to hold nuclei together like glue. Thirty feet of earth and concrete will separate this machine and its dangerous radiations from the control and detection rooms where its output will be scrutinized.

Read carefully

It looks to us as if you field people did not read carefully the article on the USDA Credit Unions in Washington, D. C., *USDA*, September 13. For the article distinctly stated: "Too bad for field employees but . . . the Agriculture and FCA CU serve only employees stationed in Washington." Yet dozens and dozens of you wrote in to the credit unions asking service. We had no desire to deluge the busy credit unions with such appeals. The idea was to encourage field employees to form credit unions wherever there are enough of them to justify this. Some have done this, notably in Philadelphia. We'd be glad to hear about others. *But please try to read with care.* Full where-to-get-it information is included in each *USDA* item; you need not write to the wrong place nor in vain if you read carefully.

In the red

Did you notice that Associated Press staff writer Charles Molony recently dug up the depressing information that the Federal Government had operated in the red for 83 years of its life? And 7 of its 32 Presidents failed ever to achieve a balanced budget? Of these Lincoln was the first, but his five successors—Johnson, Grant, Hayes, Garfield, and Arthur—followed his example. The longest string of surplus years was an even dozen and covered the administrations of John Quincy Adams and Andrew Jackson; the second longest was the 11 years which extended from Wilson's last year, through the Harding and Coolidge terms, ending with Hoover's second year. Thomas Jefferson was the first President ever to have a perfect set of balanced budgets; others were Fillmore, Pierce, and Benjamin Harrison. George Washington just about broke even himself, the Government having operated in the black for about half his term and in the red for the remainder.

We err again

The editor incorrectly stated in October 25 *USDA*, page 1, "Research luncheon," that Howard E. Babcock of Ithaca was chairman of the National Advisory Committee under the Research and Marketing Act. The Act states that the Secretary of Agriculture or an official of the USDA designated by him shall be chairman.

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Correspondence should be addressed to T. Swann Harding, Editor of *USDA*, Office of Information, Department of Agriculture, Washington 25, D. C. *Washington or field employees, please write instead of phoning*

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USDA

FOR NOVEMBER 22, 1948

How busy is busy?

HOW BUSY were you on September 27? Well, probably pretty busy, but how did your day compare with the work of the County Agricultural Conservation Office at Park River, Walsh County, N. Dak.?

The Agricultural Conservation Office is the place in the county where all Production and Marketing Administration programs dealing directly with farmers are administered. The Office and other PMA activities in the county are under the jurisdiction of a county Agricultural Conservation Association Committee of 3 farmers elected annually by the farmers of the county. There are approximately 3,000 such offices and county committees in the U. S.

Walsh County is in the Red River Valley in Northeastern North Dakota about 30 miles from the Canadian border. Land is level to gently rolling with about 2,400 farms averaging about 360 acres. About 40 percent of the land is operated by tenants. The 1945 census shows 2,000 farms owned 2,830 tractors. That year about 1,000 acres of corn, over 200,000 acres of wheat, and 50,000 acres of potatoes were grown. There were over 30,000 cattle, 8,500 hogs and about 10,000 sheep on farms.

The day's work, for 3 regular employees and an extra during this fall season, required personal attention to 68 office callers and 36 telephone calls. All had to have immediate and adequate personal attention, but 61 of those office calls were for grain loan applications, (the support price loans made under authority of Commodity Credit Corporation.) The applications included wheat, barley, and flax, each commodity requiring a different set of forms. These same 61 callers signed 6 grain purchase agreements which required still different forms. So 6 of the callers were doubles.

Walsh County is also quite a potato county. There are 440 potato growers eligible for price support. That day the county office accepted delivery of 22 carloads of support price potatoes which wouldn't be a bad day's operation for an outfit dealing only in potatoes.

The incoming mail contained 3 requests for Agricultural Conservation Program compliance report forms, 4 sets of grain loan papers returned from farmers, 6 payments for Federal crop insurance premiums, and 5 requests for grain loan application papers. The office mailed 6 sets of grain loan papers, 22 ACP compliance report forms, and receipts for 5 crop insurance premiums. The county office expects about 1,800 ACP applications during the fall and early winter.

Hybrid vigor in cows

BUREAU OF DAIRY INDUSTRY has been cross-breeding dairy cattle experimentally for nearly 10 years to find out whether the resulting hybrid vigor will produce better milk cows than pure breeding, and to devise a plan for dairymen who wish to cross-breed. The experimental plan calls for the use of purebred proved sires in all matings. Purebred cows of the Holstein, Jersey, Guernsey, and Red Dane breeds were first crossed with proved sires of each breed, and the resulting two-breed females were in turn mated to proved sires of a third breed. When all breeds have been combined, the circuit will be repeated with proved sires of the various breeds.

Production records for the first 52 two-breed cows averaged 13,036 pounds of milk and 586 of butterfat, an average increase over their purebred dams of 2,815 pounds of milk and 143 of butterfat per cow. Forty-three of the 52 crossbred cows produced more milk than their respective purebred dams, and 49 produced more butterfat. Records on 31 three-breed cows averaged 13,348 pounds of milk and 617 of butterfat, an average increase over their two-breed dams of 178 pounds of milk and 12 of butterfat per cow. Twenty of the 31 three-breed cows were better than their respective dams in milk and 19 in butterfat production.

Although the dairy scientists are not issuing a blanket recommendation for cross-breeding in every herd, they are advising owners of mixed herds or high-grade herds always to use the best proved sires available in artificial-breeding associations, regardless of the breed, and thus get the additional benefit of any hybrid vigor that may result from crossing animals of different breeds.

RMA and business

If interested in the results flowing from the Research and Marketing Act of 1946 see Farm Research Helps Business, in Business Week for October 16.

Those superflies

HOUSEFLIES are definitely developing resistance to DDT in many parts of this country and elsewhere in the world. Successive generations of these super-houseflies, when subjected to DDT applications under lab conditions, develop strains that resist increasingly greater quantities of the chemical. Reports reached the Bureau of Entomology and Plant Quarantine early this summer that DDT was giving generally satisfactory housefly control, but that it failed in several specific areas. Soon such reports came from isolated spots in 25 States; also from Egypt and Greece. Tests proved that there are strains of houseflies with superior resistance to DDT.

However, inadequate sanitation, extensive breeding of flies, and unsatisfactory or insufficient applications of DDT all make control fail. Again, entomologists have known since 1943 that DDT is most effective in cool weather. Few insect pests breed so fast or produce so many generations as the housefly. So far evidence is lacking that any other insect species is developing resistance to DDT. Extensive experiments are under way to determine definitely the factors responsible for recent failure of DDT to control houseflies. New materials and new formulations are also being screened and tested. More definite conclusions will be possible when these experiments are completed.

Retirees

October 2 Ohio Farmer carried a story about the retirement of Dr. A. J. De Fosset, for 22 years in charge of Bureau of Animal Industry work in Columbus. Hoard's Dairyman for October 10 told about the new modern dairy farm plant in Porter County, Ind., with Dr. Roy Graves, who retired from Bureau of Dairy Industry 2 years ago after 28 years' service, part owner. Associated with Dr. Graves in this enterprise is John H. Stambaugh, a local farm machinery dealer who handled surplus property disposal for the War Food Administration.

One thing the county did not mention was that all those applications, premiums, potato shipments, etc., had to be kept in order, records made and that September 27 was close to the end of the month when a number of reports are due in the State PMA Office at Fargo.

A good day's work we'd say—the kind of work that when well done makes a program function where it counts.

FHA operations

FARMERS HOME ADMINISTRATION makes loans only to farmers who cannot obtain adequate credit elsewhere. Veterans have priority. Farm- and home-management supervision, when needed, accompanies the loans. During the fiscal year ended June 30, 1948, 108,930 farmers obtained loans from appropriated funds for the purchase of livestock, farm and home equipment, feed, seed, fertilizer, and other essentials, and 76,250 of these received adjustment loans enabling them to continue or expand operations. The latter totaled \$51,343,609. The 32,674 1-year loans to families needing emergency or seasonal operating credit totaled \$8,629,590. More than a third of the funds for operating loans went to veterans. FHA also helped 2,256 borrowers (1,578 of them veterans) to buy, improve, or develop family-type farms, using \$14,480,188 of appropriated funds, while insured real-estate loans advanced by private lenders amounted to \$2,490,910. In the 17 Western States FHA made 884 water-facilities loans to a total of \$1,505,477.

During the fiscal year, 3,104 families paid off their farm ownership loans from income far in advance of their 40-year schedule. Since the program began more than a sixth of the some 60,000 families helped to achieve farm ownership have paid in full out of income, and an additional 5,000 loans have been paid by farm resales or refinancing. During the year applications were received for 191,905 operating, 36,950 farm-ownership, and 1,951 water-facilities loans.

Collections from major FHA programs amounted to \$136,697,980; outstanding indebtedness remaining is \$443,584,254. Emergency Crop Feed Loan collections amounted to \$6,757,571, leaving an outstanding balance of \$98,731,226. Operating loans amounting to \$4,872,928 were made to 8,954 borrowers from the Corporation Trust funds; collections here ran \$14,147,253, leaving \$29,520,204 outstanding. *All figures herein are as of June 30, 1948.*

Citrus squeeze

PRICES FARMERS RECEIVE for their farm products are apt to decline faster than production and marketing costs, we are reminded by the Bureau of Agricultural Economics. Some farm products feel this "price-cost" squeeze quicker than others. Citrus fruits have already felt it. It takes years to grow a citrus tree and a large part of the bearing acreage has not yet reached full bearing age. Citrus production has increased fourfold in the past 20 years. It can continue to increase. Bearing acreage is now estimated at an all-time high. The consumption rate also has increased, especially in processed form, which has been stepped up from 3½ pounds per person in 1935, fresh weight, to about 30 pounds in 1947—but not enough to avoid surpluses.

Last year some 6 million boxes of grapefruit in Florida and Texas were left in the fields, too unprofitable to pick. Grapefruit prices to growers in Florida and Texas averaged only 47 and 49 cents per box respectively (basis packing-house door) in the 1947-48 season for these two States as compared with 85 and 90 cents in 1946-47. Florida growers averaged only 90 cents for oranges in the 1947-48 season, compared with \$1.25 per box the previous season. Estimates of citrus production, value, utilization and bearing acreage, by crops, for the U. S. and for individual States, 1946-47 and 1947-48, will be found in the "Citrus Fruits" report issued by BAE in October 1948. Conditions October 1 indicate that the new U. S. citrus crop, 1948-49, will about equal last year's large crop. Average land values have recently slumped in the fruit States of Florida, Louisiana, and California, but are still higher than during the 1920 peak.

New experiment forest

Paul Smiths College in New York State has made available to the Forest Service 2,000 acres of the college's forest land for an experimental forest. Under direction of FS's Northeastern Forest Experiment Station, the new Paul Smiths Experimental Forest will be devoted to research and demonstration of timber growing and harvesting methods in the Adirondacks region. "We feel," said H. H. Lamberton, President of the College Board, "that in developing this field laboratory in forestry practices in cooperation with the Forest Service we can make a substantial contribution to the improvement of the forests of the region and to their dependent industries."

Dawn in the hen house

AN ELECTRICAL TWILIGHT is possible in the chicken house, but it is more expensive and less practical than allowing the sun to do the job in the normal way. Dimming devices are used that extinguish part of the lights and gradually dim the others, so that the chickens get to roost before all the electric lights go out. But such control requires either mechanical timing appliances or personal attention. This is why our poultry specialists, in suggesting winter lights in laying houses, advise poultrymen to turn lights on in the early morning and get the layers rustling in time to put in a full day before normal twilight guides them to the roosts. All-night lighting also may be used. This is why, on many farms this winter, the layers will be up and on the job even earlier than the traditionally early rising farm family.

A simple electric time-clock switch (cost \$10) turns on the lights in the morning. Many experiments have demonstrated that it is good business to provide enough electric lighting in the laying house to work the hens a 14-hour day. Under the lights the layers exercise more, eat more, and lay more eggs. The Rural Electrification Administration finds that, on the average, it takes about 15 kilowatt-hours a month to provide light for each hundred birds in the laying flock. Expansion of rural electric lines in recent years has made practical the longer working day for millions of American hens, and has played a part in the increase in average production of the layers. But just wait until the hens express their ideas about this!

Research achievements

Usually the Research Achievement Sheets, available from Agricultural Research Administration, appear one or two at a time, and we try to give some concise idea of each. But since a dozen of them have reached us all at once, all dealing with achievements in plant science, we shall merely list their numbers and titles so that you can request the ones you want by writing ARA: 99 (P) Crotalaria's Add Superior Summer Soil-Improving Crops in the South; 100 (P) Improved Vetch Varieties Established Commercially; 101 (P) Big-Trefoil Proved Valuable as Forage Crop for the West and South; 102 (P) New Varieties of Lespedeza Extend Its Use and Increase Production; 103 (P) Alyceclover and Halry Indigo Boost Southern Livestock Farming; 104 (P) Sweet Lupines Offer an Additional Livestock Feed Crop to Southern Farmers; 105 (P) New Method Detects Specific Elements Deficient in Soils; 106 (P) New Wild-Resistant Tobacco Variety Worth \$2,000,000 Annually; 107 (P) Controls Developed for Blue Mold of Tobacco; 108 (P) Hybrid Seed Produces ¾ Billion Bushels More Corn Annually; 109 (P) Soil Classification Helps Fit Crops and Farming Methods to Individual Farms; 112 (P) Control of Alligatorweed by 2,4-D Aids Sugarcane Production.

On the Aftosa front

WHEN IN MEXICO, Department employees call foot-and-mouth disease "aftosa", short for the Spanish, fiebre aftosa. Another brief is the recent good news that the campaign against this livestock plague is now going so well that the authorities have again cut the size of the main quarantined area, making it but nine-tenths of its original size. The gains are along the northern quarantine line—thus reducing the danger of the disease to the U. S. The U. S. force of veterinarians, technicians, and other trained specialists fighting aftosa in Mexico numbers about 450. They work side by side with Mexican colleagues. Following are some of the joint accomplishments:

The disinfection, monthly, of about 1,000 premises, 1,000 airplanes, 1,500 boats, 5,000 railroad cars, and 15,000 stock trucks.

The production of about a million doses of protective vaccine during October, representing a great increase over previous output. The thorough testing of all vaccine before its use.

The maintenance of hundreds of vehicles and the building, or improvement, of roads and jeep trails so that inspection and vaccination teams can perform their work expeditiously; this is especially important in outlying districts where travel is normally slow and difficult.

Conducting an extensive informational program involving public meetings and the preparation of press and radio material to explain to the people the nature of aftosa and how best to fight it.

A closely related activity also performed by the Department is the purchase of millions of pounds of canned meat in northern Mexico, mostly for relief purposes abroad. This operation provides a much-needed outlet for Mexican cattle which are now shut off by the border quarantine from their former market here.

Still another related operation is the patrol of the U. S. border to enforce the regulations against the introduction of prohibited animals and products. A force of about 600 range riders, traveling by auto, jeep, and horseback, patrols every mile of the border daily. For further details about the aftosa campaign ask the Department's radio service for a copy of "The Foot-and-Mouth Disease Situation," the script of a recent coast-to-coast broadcast.

Lackey of Riverside

A clipping kindly sent in from Riverside, Calif., acquaints us with the fact that Charles F. Lackey of USDA's Division of Sugar Plant Investigations stationed there, recently received honorable mention in the second annual International Photography in Science Salon, sponsored by Scientific Monthly and the Smithsonian Institution. His picture was "Leathopper Stylets in Sugar Beet Petiole," and was on display in the National Museum, Washington, D. C., during September.

Brief but important

Pullorum

If interested in the National Poultry Improvement Plan's program further to decrease the extent of pullorum disease write Press Service, USDA, and ask for No. 2242.

Statutes affecting personnel

The Department's Office of Personnel has issued a revised edition of its popular processed publication, Statutes Affecting Personnel Administration in the Department of Agriculture.

Leaf meals

We have mentioned before the Eastern Regional Research Laboratory's work on preparing excellent poultry feeds from vegetable wastes. You will find full details in new Technical Bulletin No. 958, Preparation and Use of Leaf Meals from Vegetable Wastes.

British farm publication

The new fully illustrated British Agricultural Bulletin is now out, first issue free; thereafter \$5 for the next four issues. For your free copy write British Publications, Inc., 150 East 33 Street, New York City 16.

How doth the busy bee

If you really want to know how she doth get processed publication E-276, September 1948, "Information About Bee Culture," from Bureau of Entomology and Plant Quarantine. It gives all sources of information on bees, State and Federal.

Detergents

In tests carried on by specialists in our Bureau of Human Nutrition and Home Economics synthetic detergents generally proved to be less efficient than soaps in laundering soiled cotton in soft water, but in hard water they were twice as efficient as most of the soaps.

Rural health

Cooperation for Rural Health, Miscellaneous Report 123, Farm Credit Administration, reviews rural health activities by farmer co-ops, 1945-47, outlines three systems of prepayment, and offers other useful suggestions.

Dean Froker

Rudolph K. Froker, professor of agricultural economics and for 3 years associated with AAA on milk-price agreements, has been named Dean of the College of Agriculture, University of Wisconsin, succeeding Ira L. Baldwin who became Vice President of the university of which E. B. Fred is President. Froker has all-around experience in research, teaching, and extension.

Feed from potato waste

Bureau of Agricultural and Industrial Chemistry has a new publication, AIC-204, "Recovery and Utilization of Pulp from White Potato Starch Factories," telling how waste potato pulp may be converted into livestock feed, while at the same time stream pollution is much reduced. Get the publication from Eastern Regional Research Laboratory, Chestnut Hill Station, Philadelphia 18.

New poultry coordinators

Sam A. Moore and Roy D. Carlson have been appointed coordinators to assist in the administration of the national poultry and turkey improvement plans carried on by Bureau of Animal Industry and the States. Mr. Moore is a native of Tennessee and a graduate of Texas A & M; Mr. Carlson a native of Minnesota and a graduate of its College of Agriculture. Both have had broad experience in poultry work.

The Thrasher farm

Independent Woman (published from 1819 Broadway, New York City 23) for November, contains an illustrated article on the conservation demonstration on the Thrasher farm in Frederick County, Md.

Rice research

You will find an abstract of the projects in rice research being carried on by various Department agencies under the Research and Marketing Act in Press Release No. 2152 for which write Press Service, USDA.

Hog on ice?

Nope, the hog is not most independent nor even comfortable on ice. Our scientists say that pigs grow faster and live healthier lives when kept at 70° to 80° F. In that respect, not to mention others, they closely resemble human beings.

Field Safety Councils

Field Safety Councils have been established in Chicago, Denver, Fort Worth, Honolulu, Philadelphia, and San Francisco by the Federal Interdepartmental Safety Council. Agencies operating in or adjacent to these cities are urged to encourage local administrative officers, or their representatives, to apply for membership in these locals.

Judge Gifford retired

Judge Glen J. Gifford, Office of Hearing Examiners, has retired after 15 years of Government service in Office of the Solicitor and, since 1946, in OHE. A native of Indiana and a graduate of Indiana University, he practiced law in that State until he was elected Judge of the thirty-eighth Judicial Circuit in Indiana in 1930, which position he resigned in 1933 to enter Sol.

New in OES

Dr. Harold C. Knoblauch is the new Assistant Chief, Office of Experiment Stations. He is a native of Michigan who took his bachelor's at Michigan State, his master's at Rhode Island State, and his doctor's degree at Rutgers. He joined the Research Division of Soil Conservation Service in 1935, after having worked 4 years at Rhode Island State, and entered OES in 1940 as a soils technologist. He has held positions of increasing importance in OES during the past 8 years.

The Farmer and the Druggist

This is the title of the address Secretary Brannan delivered October 15 before the National Association of Retail Druggists, meeting in Atlantic City. It is full of extremely interesting and helpful information about the Department's successful research projects in the field of pharmacy. Here the penicillin, subtilin, tomatin, polymyxin, streptomycin, rutin, and many other stories are told entertainingly and informatively. To get a copy write Press Service, USDA, and ask for No. 2163.

You dote on that poinsettia?

How many times have you tried to keep a Christmas poinsettia in tip top shape? Were you successful? Our scientists say the plant dotes on long nights while you dote on it. Poinsettias are native to the subtropics. In a lighted living room the plant usually gets too much light—and as little as half a foot-candle of light per hour in the middle of the night will discourage it from blooming. Place it where it will get plenty of light by day, then blanket it in black for early bedtime; protect it from drafts and extreme temperatures; keep it watered; give occasional applications of liquid manure, and the plant should thrive.

X-disease

A preliminary survey discloses that X-disease of cattle results in heavy death losses and is otherwise of economic importance. Its cause is still unknown, but the four scientists who made the survey say that it probably does not result from poisoning by a specific plant. It may be a virus or fungus infection, or the result of mineral poisoning or nutritional imbalance—or even a combination of causes.

Jefferson Thomas

This picturesque and entertaining character whose exact age always remained a secret, passed away on July 25, and was succeeded as assistant editor with the Florida Extension Service and Experiment Station, Gainesville, by William L. Ragsdale, Jr., a recent graduate in journalism and commercial art of University of Alabama.

Planning Your Exhibit

This is the title of a how-to-do-it bulletin published and sold by the National Publicity Council for Health and Welfare Services, Inc., 130 East 22d St., New York City 10. It is 32 pages long and full of down-to-earth ideas about planning, building, and conducting an exhibit.

You want to write a book?

If so, you can hardly do better than attentively read *On Being an Author*, by Vera Brittain—who has been one many times. Originally published in England, this book has reappeared here from the Macmillan Co., with a helpful introduction and series of notes by Prof. George Savage, of the University of Washington. Procure it at your bookstore, your local library, or through the USDA Library.

Results

In *The Lubbock County Study*, a bulletin issued by the extension service of Texas A & M, College Station, Tex., you will find an evaluation of extension-program accomplishments in Lubbock County, Tex. The study is of special interest because here an agricultural agency made a determined scientific effort to find out how effective its work was and to discover weaknesses needing correction. The study is thorough and genuinely informative.

Beltsville Small Whites

Have you noticed how the apartment-sized turkey is making quite a widespread appearance? It took our scientists at Beltsville about a decade to pare down and streamline turkeys to fit the smaller ovens of the smaller families. But that research achievement has been accomplished without sacrifice of flavor or fleshing, and the Beltsville Small White is now being marketed widely. It is no longer necessary to invest in a mammoth behemoth for Thanksgiving or Christmas.

Potato vitamins

Farm Research, Geneva, N. Y., for October, reports on some potato work by the U. S. Plant, Soil, and Nutrition Laboratory at Ithaca. No relation was found between yield and vitamin C content, but delay in planting time lowered, and delay in harvesting—so long as the tops were living—increased the vitamin C content. Differences in maturity at harvesttime had little or no effect on loss of vitamin C in storage. The greatest loss occurred during the first 60 days of storage, and this loss was also greater at 40° than at 50° F. The rate of loss lessened between 60 and 140 days and was the same for both these storage temperatures. Irish Cobbler, Katahdin, and Fillmore varieties were used. For more details contact the laboratory.

The cold front

Except for one woman employee we know, all of you will probably have colds from now on. Well, science says that a relative humidity of 50 percent reduces the infecting ability of influenza virus about four-fifths. The scientists also aver that 1948 will not be a big "flu" year, and we have sulfa drugs and penicillin to reduce the death rate from influenza and its buddies. And you can blow your nose to your heart's content, for the scientists now say that doesn't cause ear trouble. Happy coryza to you all.

How much milk?

"How Much Milk Can You Give" is the title of a talk by Extension Editor Earl C. Richardson of Michigan State before the American Association of Agricultural College Editors in Spokane last August. But it contains so much material so well, so humorously, and so concisely expressed, in which anyone dealing out agricultural information will be interested that the editor of *USDA* has gotten hold of some copies for you. Write the editor or phone Miss Arden on Ext. 4649.

Extension Editors

Bently B. Mackay, formerly Extension Editor in Louisiana, who served during the war in Office of Information and as agricultural adviser with a U. S. consulate in Brazil, is now a Louisiana extension information specialist in the livestock field. . . . Tom Johnson, Extension Editor of Indiana, has joined that exclusive coterie who have been awarded the 33d Masonic degree. . . . Jack Wooten, a former assistant extension editor in New Mexico, and connected with various phases of agricultural information since 1936, died in his sleep at Las Cruces, N. Mex., October 8.

Editor Fray

Foreign Agriculture, the Office of Foreign Agricultural Relations' monthly publication, has a new editor, Alice I. Fray. The former editor, Hally H. Conrad, left Washington late in October to make her home in North Carolina. Miss Fray has returned to Agriculture after a year on the staff of the Federal Security Agency's periodical, the *Social Security Bulletin*. Prior to that, she was at Beltsville as the Department's engineering editor, at the White House with the President's Commission on Universal Training, and with the Office of Information.

New FS division

Forest Service has established a new national Division of Fire Research to develop and improve techniques and equipment for use in forest fire suppression. It is headed by Arthur A. Brown, who has been chief of the Division of Fire Control since July 1947, and who will be succeeded there by Carl A. Gustafson. Brown is a native of Kansas who has been with FS since 1921; Gustafson, also an FS veteran, hails originally from Minnesota. You will find much interesting and relevant detail in press release No. 2176; write Press Service, USDA, for a copy.

Writing seminars

We can recommend a very comprehensive and useful outline for seminars in writing, suggesting the points to be discussed and demonstrated in a 1-week seminar led by an editor. It was prepared by Robert T. Hall, Forest Service, USDA, Washington 25, D. C., in case you want to write in to him for a copy. While aimed at specific FS experiment-station objectives the outline would prove useful in planning almost any kind of writing seminar. Don't let Hall's abbreviation "W. O." get you down; it means Washington Office! Ask for the "Outline for Experiment Station Seminars in Writing."

Death of a pioneer

The death is reported of Hugh G. Calkins, a pioneer of Forest Service's Region 3, a native of Ohio, and a graduate of Yale Forest School. He transferred from FS to Soil Conservation Service in 1934, undertook an important forest assignment with the Bureau of Inter-American Affairs in Guatemala in 1942, went to Europe with UNRRA in 1944, and returned in 1947 to accept a position with the Bureau of Reclamation in California, where he died at St. Helena. He had an outstanding record as an administrator and left a host of friends.

Loss of leave

Some recent issues of *USDA* have carried comments about Department employees who have lost annual leave at the end of the calendar year because they had accumulated more than the regulations allowed for carry-over. *USDA* received a letter signed by five employees of one bureau expressing surprise that *USDA* would seem to applaud such loss. It was not the Editor's intention to encourage the loss of leave, nor to cause employees to feel that they would be commended for such a course of action. The two paragraphs were simply news items.

Sweetpotato starch

Research Achievement Sheet No. 110 (C), available from Agricultural Research Administration, tells of the method originally developed by B. T. Balch and H. S. Paine, Bureau of Agricultural and Industrial Chemistry, for making white starch from sweetpotatoes. The method was modified for industrial use by F. H. Thaurber, and was operated in a factory at Laurel, Miss., for 11 years, and in a large commercial plant at Clewiston, Fla., 1945-47. The starch is superior for specialized uses and its development has made possible a wholly new industry, the principal limiting factor in commercial production being the current high cost of sweetpotato production.

New insecticide stops caterpillar

Salt marsh caterpillars by the millions, causing the worst outbreak of the pests in the history of the Salt River Valley, Ariz., were reported by the USDA. Much of the cotton in that area now has been defoliated. To prevent the caterpillars from moving into unfested fields of other high-value crops, farmers have been forced to trench around infested fields and fill the ditches with water. Some even floated oil on top of the water. A new insecticide dust mixture composed of 15 percent of chlorinated camphene, 5 of DDT, and 40 of sulfur has been found by our entomologists to give excellent control of this pest on cotton. Applied at the rate of 20 pounds per acre, this insecticidal dust combination has reduced infestation of the pests in cotton fields to very low numbers in a limited number of experimental field trials conducted in the Salt River Valley. According to the reports received in Washington, dead caterpillars of all sizes could be found by the thousands on the ground in fields treated with the new insecticide. Only a few could be found on the plants. The pests were still very numerous in untreated areas.

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USDA

FOR DECEMBER 6, 1948

100 test farms

A LOT OF PEOPLE besides Georgians are now casting keenly interested glances at the results of Georgia's Better Farms Plan, commonly known as the Callaway Plan, the 3-year scheme promoted by Cason J. Callaway, industrialist and farmer of Hamilton, Ga., in 1944. Under his leadership, 700 Georgia businessmen organized 100 corporations, each of which agreed to buy and reclaim a run-down farm in their State, making it in the process a better-farming demonstration in its community. The four-point program involved: Improve the soil, provide long-term credit, use more machinery, and have processing plants near farms.

From the first, the objective was to prove that famished and eroded land can be made productive again, and that business, industry, and agriculture must work together as one group to do the job successfully. The plan was enthusiastically accepted. The 100 corporations, each having 7 stockholders investing \$1,000 apiece, were organized in a short time. The run-down farms were purchased, and operators (potential buyers) hired to run them. The farms were planned for scientific farming by technical representatives of the Soil Conservation Service, the Extension Service, and the Georgia Agricultural Experiment Station.

Then came the business of getting the plans on the land—more than 130 million acres of it scattered over the State in a hundred communities. Diversification of cropping, terracing, leveling and planting gullies, clearing, establishing kudzu and lespedeza, rotations for old cotton land, building farm ponds, improving and planting orchards and vineyards, putting woodlands in shape for sustained use, assembling dairy herds, making farmsteads livable, irrigation on some farms—these are some of the things that went into the job of reclaiming the farms.

After 3 years, Mr. Callaway says his experiment is now complete. Of the 100 farm corporations he sponsored he rates 30 as excellent, 20 as good, 25 as fair, and 25 as ordinary to failures. He intends to publish a book before long in which he will include some of the original budgets of the Callaway Plan farms as compared with the actual budgets after operations were completed. "The information is too valuable to go to waste," he said. "It is the kind of thing I needed when I started farming, and I want it to be available to other people."

Facts on safety

USDA'S SAFETY REPORT for calendar year 1947 has appeared. The cost of compensation benefits covering all injuries was \$540,919, as compared with \$494,928 in 1946, and with \$619,899 in 1945. *There was an increase in the frequency of injuries per million man-hours worked from 11.99 in 1946 to 13.2 in 1947.* There were three fewer fatal injuries than in 1946, yet fatal injuries resulting from vehicle accidents increased from six in 1946 to nine in 1947. The frequency rate for fatal injuries declined slightly, but is still nearly as high as in 1939, there having been a drop to a minimum in 1942-43.

The same old causes of lost-time non-fatal injuries appear, falls of persons, using hand tools, and handling objects leading the list. The 1947 frequency of lost-time and fatal injuries was more than 10 percent above 1946, but the number injured per thousand persons was the lowest since that for 1938—1.785. The rate has dropped pretty steadily since 1939, when it was 7.58. As Director Reid of Personnel says: "The increase in frequency of injuries in 1947 is a matter of concern to the Department. While man-hours worked have decreased substantially, the reduction in number of accidents has not kept pace. A conscious and alert attention to safety by all of us will reduce the number of accidents."

Caldwell retires

Dr. Joseph S. Caldwell, a native of Tennessee and a graduate of Maryville College and University of Chicago, has retired at Plant Industry Station after 31 years of service. He entered old BPI in 1917 as a specialist in drying vegetables, and has made valuable contributions in the field of how fruits and vegetables behave when canned or dried, or in the form of unfermented juices. He is author or coauthor of 103 technical articles and bulletins and his work during World War II was especially cited by the agricultural research administrator.

4-H good-will ambassadors

SEVENTEEN 4-H CLUB members comprising the American contingent of the International Farm Youth Exchange group recently returned to this country after a busy, profitable, and interesting summer spent on farms and in rural communities of Great Britain and on the European Continent. These young men and young women, ranging in age from 19 to 26, went abroad under a program sponsored by the Extension Service and State land-grant colleges. Cooperating in the project were the Department's Office of Foreign Agricultural Relations, Department of State, and allied organizations of Rural Youth, USDA. Expenses were met by private and commercial organizations and agencies.

Members of the 4-H good-will mission came from Maryland, West Virginia, Montana, Arkansas, Wyoming, Nebraska, Washington State, New York, Iowa, Oklahoma, Pennsylvania, Texas, Minnesota, Connecticut, Michigan, Kansas, and North Carolina. Members of the IFYE group each visited Great Britain and at least one other country—Denmark, Sweden, France, Norway, The Netherlands, and Italy—where they lived, and worked on farms peculiar to the country they were in.

In Europe these young people learned as much about the country which they visited as possible—its agriculture, its people, and its farm life—with the idea of passing on to other 4-H members and groups of young people their experiences and reactions. At the same time, they left with the people they met first-hand information about farm life in the United States.

RMA tobacco research

The recommendation of the Tobacco Advisory Committee for studies under the Research and Marketing Act in fiscal year 1950 will be found in release No. 2335, for which write Press Service, Office of Information, USDA.

In October, 175 of the stockholders in this unique scheme toured Eastern and Midwestern States visiting farms and experiment stations, getting ideas on how to start with poor land and a small investment and build up to permanently fertile land and valuable property.

Let there be light!

THERE IS NEWS about fluorescent lights, say the lighting specialists of the Rural Electrification Administration. This electric tube with mercury vapor inside is more often seen in the straight tubular shape. Now, however, circular and semicircular fluorescent tubes are made to use in lamps of greater variety. Also, there is new instant-starting fluorescent equipment which ends that slight delay in lighting after the switch is turned on.

Fluorescent tubes have certain advantages over the familiar incandescent bulbs. The straight tubes can be used over bookcases, cornices, cabinets, and valances, and they make excellent reading lights over beds and sofas. Such lamps emit less heat than incandescent lamps, and they furnish between two and three times as much light for the same wattage. Furthermore, they last two to three times as long as incandescent bulbs, though turning them on and off frequently shortens their lives. Although fluorescent lamps can be installed in a house already wired, special fixtures are required. The tubes are of varying lengths and diameters, according to their wattage, and must be selected to fit the fixtures for which they are intended. Shades or shields should be used as with the incandescent bulbs.

It has been found that fluorescent lamps and incandescent lamps have a different effect on colors. Fluorescent lighting tends to emphasize the cool colors like blue and green, and tone down the warm colors. On the other hand, the reddish-yellow light of incandescent lamps intensifies the warm colors and dulls the cool. This difference should be borne in mind when choosing rugs, curtains, or other furnishings. Fluorescent tubes come in several shades of near-white. Those known as 3500-white, 4500-white, and daylight are best for kitchens and other workrooms. The shade called "soft white" is the warmest and most pleasing for other rooms.

Cicero said:

"Of all the occupations by which gain is secured, none is better than agriculture, none more profitable, none more delightful, none more becoming to a free man."

News from Puerto Rico

OUR ROVING CORRESPONDENT, the famous migratory farm worker Joe Tonkin of Office of Information, reports that P. R. is not only a land of sugarcane, coffee, tobacco, and smiling people, but also one of ever-growing and successful agricultural information projects. Indeed its Caribbean neighbors want to know how "The Enchanted Isle" operates. Press, radio, and visual aids all flourish.

"Actualidad Agricola" is a daily farm and home broadcast by Extension Service aired over 14 of the island's 23 radio stations at 5:45 each weekday afternoon, all USDA agencies in P. R. cooperating. Heard throughout the Caribbean area it is of special interest to Bureau of Entomology and Plant Quarantine and Forest Service, and also has great possibilities for Production and Marketing and Farm Home Administrations. The program originated under old FSA some years ago. Group listening at thousands of cross-roads stores compensates for the limited distribution of radio sets on the island. Here "el jiboro" listens when he leaves the cane fields at evening. In addition county and home demonstration agents in five areas regularly broadcast over local stations. A couple of months ago 4 radio schools were held in various parts of the island to aid local workers to put on better radio shows; 90 extension workers attended.

Highlight of press activities in P. R. is the excellent cooperation in all phases of farm news by "El Mundo," San Juan's top newspaper with a plant perhaps second only to that of "La Prensa" in Argentina. Like radio, visual aids reach many who cannot read and a large percentage of the county extension offices are equipped with 16-millimeter sound motion-picture projectors. Farm bulletins are prepared with exceptional simplicity and good illustrations. County agents' circular letters are well received.

This combination forms an active program of agricultural information. Basic thinking in the Spanish language and experiment station conditions comparable to those of neighboring States aid in giving P. R. a respected position in the dissemination of farm and home information throughout Pan America. There is good reason to believe these activities will increase.

Aristotle said:

"For the best material of democracy is an agricultural population; there is no difficulty in forming a democracy where the mass of the people live by agriculture or the tending of cattle."

Magazine fare

SEVERAL NOVEMBER magazines included articles of special interest to USDA readers. Some of you have contributed background facts for the editors and free-lance writers who call on the Department for information. For an article on our perhaps not-so-hopelessly-plundered planet, see Time for November 8, pages 27 to 31. Time's Science Editor quotes some optimistic statements from Dr. R. M. Salter, Chief, Bureau of Plant Industry, Soils, and Agricultural Engineering.

"Don't Underrate Brother Rat," by Alfred H. Sinks in November Country Gentleman, has a lot of facts about one of our most destructive pests, and methods of control. As Sinks was told by half a dozen scientists, "If you hope ever to be rid of rats, you'll have to learn to *think* like a rat!" In the same magazine Margaret Smith, Bureau of Human Nutrition and Home Economics, gives her rules on "Pressing to Keep the Neat Look." Read this illustrated piece on the correct way to press wool serge and other materials, and maybe you can rise and *not* shine.

Woman's Day for November features a "Squeeze Week," with 1 week's menus for four costing under \$11. It is this magazine's belief that a Squeeze Week every month or so will do no harm to a well-nourished person and may go a long way toward balancing the budget. "The Beautiful Bean" is the subject of Seventeen's food section, and beautiful is the word for the galaxy of beans used to illustrate the story.

October Fortune, in a lengthy article on "Farm Horsepower," points out that there is now more mechanical power on the farms of America than in all the country's factories! The unique and in every way extraordinary work at the USDA Tillage Machinery Laboratory, Auburn, Ala., and at the U. S. Cotton Ginning Laboratory, Stoneville, Miss., is featured. Consult Fortune for details on their remarkable work.

October Farm Journal calls attention to the colored 4-H Clubs' first regional camp, held this fall in Baton Rouge, La. The camp was attended by 82 representatives of the 300,000 colored 4-H'ers.

Reviews of Grass, the Yearbook of Agriculture, continue to appear in both the scholarly and popular press. Scientific American for September contained a review by W. R. Chapline, Chief of the Division of Range Research, Forest Service, who says that the current volume "is the most authoritative summary of grassland agriculture ever undertaken."

Who'll be a farmer's wife?

RURAL SOCIOLOGISTS in the State of Washington tried not long ago to find the answer by questioning a thousand women college students. But professional men rated first and businessmen second in preference, though girls from farm homes preferred farmers and professional men about equally for husbands, and businessmen came third. The sociologists also found out some other things.

For instance, women generally prefer husbands who are their equals or superiors in education, hence they naturally lean towards professional men. Education does not prejudice the young woman against being a farmer's wife—the higher their parents' education the more favorable they are to farmers. The hitch is they want the same conveniences, income, and cultural advantages on the farm as in town. Many feel that farmers have economic independence, that rural life is enjoyable, that you can use your skills readily on a farm, and that farm life is favorable to rearing children, good family relations, and sound health. But social disadvantages, isolation, hard physical labor, long hours, smaller income, and inferior educational advantages can easily outweigh other considerations.

Here is a clue for farm organizations, extension workers, and other groups interested in American farm life. More girls would marry farmers if the farm offered more social life, improved educational facilities, less drudgery, shorter workdays, and a secure reasonable income. As things are now the migration rate from farms is greater for young women than for young men, though girls have a better opportunity to marry in rural than in urban regions. More studies of this sort would be helpful.

New ACP head

ALVIN V. McCORMACK of Lewiston, Idaho, is the new Director of the Agricultural Conservation Programs Branch, Production and Marketing Administration, succeeding Under Secretary Loveland. As such he is responsible for coordinating the planning and administration of the Agricultural Conservation Program in which 3 million farms participate. He has devoted his entire life to agricultural production and management and is owner-operator of a large general farm in Idaho. He also has a broad background in business and marketing organization work.

Born and reared in Idaho, Mr. McCormack graduated in agriculture from his State university and served in the Navy during World War I. Since 1933 he has served almost continuously in the farmer-committee system administering farm programs in his native State. Most recently he has been chairman of the Idaho State PMA Committee which position he left to accept his appointment in Washington. He has also been assistant to the director, Commodity Credit Corporation, in Portland, Oreg.

Brief but important

Statistical Lab Report

The 1947-48 Annual Report of the Statistical Laboratory, Iowa State College, Ames, Iowa—our Bureau of Agricultural Economics is a cooperating agency—is now available. If statistically minded write the lab for a copy; abstracts of important papers are included.

Dr. Slate to P. R.

Dr. William L. Slate, Director Emeritus of the Connecticut Agricultural Experiment Station, has accepted a post as consultant at the Agricultural Experiment Station, University of Puerto Rico, Rio Piedras. He will spend the next year there in an advisory capacity to the station's staff.

FS experiment stations move

The Northeastern Forest Experiment Station has moved its headquarters from the Bankers Securities Bldg. in Philadelphia to 102 Motors Ave., Upper Darby, Pa. The California Forest and Range Experiment Station has moved to the new Forestry Bldg. on the University of California campus; its new address is P. O. Box 245, Berkeley 1, Calif.

Sudden death

George H. Shaw, chief of the architectural engineering section, Federal Meat Inspection Service, died suddenly November 7, aged 67. He had been in apparent good health. Trained at MIT and the Brooklyn Polytechnic Institute, Mr. Shaw entered the Service in 1913 as a sanitary engineer, after having worked as an engineer in various cities of Connecticut and Massachusetts, as well as in New York City. After service in World War I Mr. Shaw was in the U. S. Public Health Service and in the Philadelphia health service until 1930 when he reentered meat inspection as senior architectural engineer. He made outstanding contributions in the development of standards and equipment for meat-packing establishments.

Kitchens

During the past 50 years kitchens have progressed from dark, dingy, shabby griminess, with murky walls and gloomy woodwork and wainscoting, to hospital sanitation and fierce blinding whiteness. This was an improvement, and meanwhile the home economists refashioned the housewife's workshop to render her more efficient and less fagged. Now comes Look Magazine for November 23 illustrating (in color) a modern kitchen where the woodwork, closets, cupboards, and work tables, as well as the wall paneling, are of light-toned cypress—they could be of other natural woods. Even the ghostly gleaming refrigerator is painted to tone with the paneling. Such kitchens are positively inviting after the dentifrice-polished white ferocity of most modern sanitary kitchens, or wouldn't a man know?

Occupational deferment

Secretary's Memorandum No. 1232, signed by Acting Secretary Loveland, deals with Occupational Deferment from Training and Service under the Selective Service Act of 1948, and is dated October 23.

Chicago credit union

Secretary-Treasurer D. W. McGuire of the Chicago Bureau of Animal Industry Credit Union writes in to say it is a flourishing institution. Organized in 1931, it has more than 160 members and assets of about \$27,000. That it survived to attain its present sound condition is due largely to the efforts of Miss Hazel D. Robinson, who transferred to the meat inspection staff in San Antonio in 1947, for reasons of health. There is also a credit union for meat inspectors in San Antonio.

Ralph Shaw was there

In mentioning the British Royal Society Scientific Information Conference in USDA for October 25 (see "Scientific publications") we should have added that Ralph Shaw, USDA's Librarian, attended as representative of this Government on behalf of the Department of State and its London Scientific Mission, and that he reported on the Conference in Science for August 13, 1948. That information got hacked out of our article through oversight.

New-type milk heater

F. P. Hanrahan of Bureau of Dairy Industry has designed and obtained a public-service patent on a new type of heater capable of raising fresh milk to temperatures above boiling and producing changes therein that are used advantageously in many dairy-manufacturing processes. It can also be used to treat other liquids, such as fruit juices, where a continuous flow through the apparatus is desired, and is suitable for sterilizing, pasteurizing, forewarming, and preheating milk under pressure for spray drying. For more details see release No. 2303 (write Press Service, USDA, for it) or query BDI.

Bad and good writing

Dixon Wecter, author of *The Age of the Great Depression*, recently unburdened himself of his thoughts on bad writing by professionally trained authors. He was in the main after the professors whose tomes flow from university presses, but you might include some scientist-authors as well. We suggest that, if interested in making bad writing better, you write Fon (*not Don*) W. Boardman, Jr., Columbia University Press, Columbia University, New York City 27, and ask him for a copy of Wecter's "What Can University Presses Teach Professors?" as reprinted by Columbia Press' Pleasures of Publishing. He has kindly consented to supply copies to those of you who write in.

First, eh?

On page 4 of USDA's October 11 issue there was an item "FS joins big league." It related to dedication of the new stamp cancellation die reading "Remember only you can prevent forest fires." Of course wags wrote in and asked how they could stop the lightning. Then Forest Service planned a research program to stop lightning, or some of it, and USDA will cover that. But we also said that this was the "first" cancellation die the Post Office had ever granted other than to Red Cross, Community Chest, and U. S. Bond campaigns. Whereupon Arthur D. Read, consulting forester of West Monroe, La., sent in an envelope, dated 1921, bearing "Fire is the Enemy of Forests, Prevent Fire!" on the cancellation. Did we say "first?" Hereafter we'll play safe and say "First—maybe!"

A head

We have copies of an outlook summary comprising the Bureau of Agricultural Economics' outlook statement for 1949 plus a working or discussion draft outlining economic conditions that may prevail, given two different situations, during the next 5-6 years. For copies of this "Short-run and Intermediate Outlook Material" phone Miss Arden, Ext. 4649, or write the editor of *USDA*.

Research Intern Program

The Research Intern Program developed jointly by the Association of Land-Grant Colleges and Universities, the Department of Agriculture, and the USDA Graduate School has now proceeded to a point where the types of internship have been worked out and a mimeographed document describing them is available from the Graduate School. Nominations should be sent to T. Roy Reid, USDA's Director of Personnel, before January 1, 1949, accompanied by a completed application on Form 57.

Forest insect control

Research Achievement Sheet No. 111 (E), available from Agricultural Research Administration, tells how basic research in Bureau of Entomology and Plant Quarantine led to revolutionary improvements in sprays and spraying equipment for control of destructive forest insects. Here forest conservation was effectively promoted by entomologists. It is now possible to treat an acre of woodland effectively with 1 gallon of concentrated spray applied with a power sprayer; 600 gallons of dilute spray were formerly required.

Flemming awards

The District Junior Board of Commerce has invited the Department, through the Federal Personnel Council, to participate in its plan to select the most outstanding young male Government employee working in the Washington area—this includes Beltsville. The successful candidate will be presented with a plaque to be known as the "Arthur S. Flemming Award," and will also be eligible for national recognition when entered in competition for the National Junior Chamber of Commerce "Good Government Award." This will be presented to the most outstanding young male Government worker in the U. S. For further details contact E. E. Kriesman, Office of Personnel.

Newcastle disease

State and Federal scientists met in both New York and Chicago recently to take stock of Newcastle disease of poultry which cropped up in California 5 years ago and has now spread to 46 States, taking a national toll of 10 million dollars a year. It is neck-and-neck with pullorum now as a destroyer. Live virus vaccines are favored by our USDA scientists, but some workers hope to develop an effective killed-virus vaccine. The possible relationship between Newcastle disease and human encephalitis is also being probed.

John B. Thomas leaves

John B. Thomas, Marketing Research Analyst and Industrial Engineer, Marketing Research Branch, Production and Marketing Administration, has left the Department to take a position as Sanitary Engineer with the U. S. Public Health Service. For more than 10 years Mr. Thomas has been associated with sanitary and industrial engineering work of the Department. He was Principal Industrial Specialist for WFA and directed the engineering work under the Lend-Lease Plant Expansion Program. Mr. Thomas was formerly Sanitary Engineer for the Federal Housing Administration.

Governor Scott

Kerr Scott recently elected Governor of North Carolina, is a farm boy who graduated from North Carolina State College of Agriculture and at one time served as a county agent and also with old FSA. After 15 years he announced his "retirement" and headed on up in the world with that wealth of experience behind him. He was North Carolina's State Commissioner of Agriculture when he resigned to run for Governor. He has long been prominent agriculturally; he was at one time Master of the State Grange.

Plenty of turkey

This issue of *USDA* hits you between Thanksgiving and Christmas, when there should be plenty of turkey—even though production is 10 percent below that of last year. For there are some 31.7 million birds available, fewer will probably go into storage than usual, and shoppers will find the gobblers in greater choice of sizes than ever before. The small birds, Beltsville Whites and White Hollands, will be there in force. Also the modern tom is as tender and well-fleshed as the hen, though slightly less fat. (That first sentence up there somehow reminds us of the hired man who was shot in the middle of the conversation.)

Virgin Islands study

An interagency committee representing both USDA and the Department of the Interior, is now studying the agricultural resources and agricultural education and research needs of the Virgin Islands. The USDA group is headed by Ralph R. Will, Office of the Secretary and also includes Harry Mileham of Extension Service, B. T. Inman of Bureau of Agricultural Economics, and Gustave H. Helmholtz of Rural Electrification Administration. Clay Stubbs of Farmers Home Administration, U. S. Allison of Soil Conservation Service, Garibaldi Laguardia of Production and Marketing Administration, Arthur Upson of Forest Service, and Kenneth Bartlett of Office of Experiment Stations—all stationed in Puerto Rico—are also engaged in the survey.

New Naval Stores head

Jay Ward, who has been in charge of the Naval Stores Conservation Program (conducted by FS for PMA) since 1936, has retired; William Welsh, assistant supervisor of this program with headquarters at Valdosta, Ga., since 1945, has succeeded him. Mr. Ward entered USDA as a AAA marketing specialist in 1933; he is a native of Tennessee, a graduate of Benton College of Law at St. Louis, and practiced law and engaged in various business enterprises before entering the Department. Mr. Welsh joined FS in 1933, after 5 years with the Army Engineering Corps working on flood-control projects. Assigned to forest survey work in the Southern States he first began work in the Naval Stores Program in 1936, at Pensacola, Fla.

Radio

Radio from the point of view of the men from all over the world who put on farm programs is covered in a "Transcript of Agricultural Workshop Sessions," held in Columbus, Ohio, May 1-2, 1948. Getting and holding the interests of 4-H and FFA members; what radio farm directors would like to know about their own programs and listeners; a few listeners speak for themselves; progress on using television for agricultural programs; all are considered. The discussion is drawn together in an excellent report by Hal Totten of WGN who acted as recorder. It is the best report of such a conference we've seen. You can get a copy from the Radio Service, USDA, Washington 25, D. C.; ask for the Transcript of the Agricultural Workshop Sessions.

Coweta

The editor once had the pleasure of visiting Coweta Experimental Forest, near Franklin, N. C., and found it simply fascinating. He could not do it half justice in *USDA* for lack of space. But you will find an informative illustrated article on what they do there in November Scientific Monthly. It is "Our Forests and Watersheds," by Edward N. Munns, Chief of the Division of Forest Influences, Forest Service. Look it up by all means.

Motion pictures

Chester A. Lindstrom's August-September "Letter to USDA Film Users" is of especial interest as it contains his account of the Ninth International Exhibition of Cinematographic Art held in Venice, August 19-September 4, which he attended. You will also find therein announcements of new films, a statement of the Motion Picture Service's television policy, and other items of interest. Procure copies from Motion Picture Service, Office of Information, USDA, Washington 25, D. C.

Business and consumers' outlook

We were especially impressed by the talk Mrs. Arnyess Joy Wickens, Bureau of Labor Statistics, Department of Labor, gave before the October Agricultural Outlook Conference on the subject: "Business and Consumers' Outlook for 1949." (May we venture parenthetically to say that she delivered it so well we thought her almost the best woman speaker we had ever heard?) You will find in it a stimulating discussion of business trends, buying power, Federal expenditures, and their probable effects on American agriculture. It is fact-packed but readable. If you want a copy phone Miss Arden at Ext. 4649 or write the Editor of *USDA*.

Joseph F. Cox

There have just come from the press (John Wiley & Sons) two 1948 editions with current revisions of books written by the late Joseph F. Cox, of the staff of the Agricultural Conservation Programs Branch, Production and Marketing Administration, and Lyman E. Jackson, Dean of Agriculture, Pennsylvania State College. Copies are in the Department Library. One is entitled "Field Crops and Land Use"; the other, "Crop Management and Soil Conservation." "Field Crops and Land Use," first issued in 1937, is widely used for classroom teaching in colleges. "Crop Management and Soil Conservation," first published in 1942, was used extensively by the Army in paper-back edition in GI courses in Agriculture and now in veterans' on-farm training courses. Mr. Cox, a Department employee since 1933, died instantly of a heart attack, November 13, at the age of 58. An agronomy graduate of Ohio State University he had taught at Pennsylvania State College and Michigan State College. He was Dean of Agriculture at Michigan from 1927 until 1933 when he joined the Department. He was author of numerous books on agronomy and soil management, several of which are used as textbooks in high schools and agricultural colleges.

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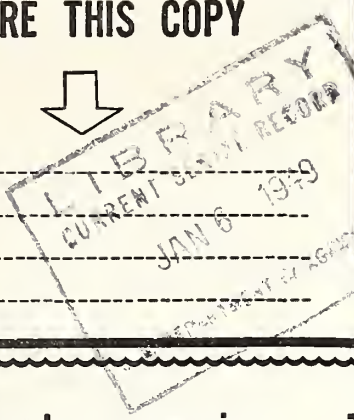
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Correspondence should be addressed to T. Swann Harding, Editor of *USDA*, Office of Information, Department of Agriculture, Washington 25, D. C. *Washington or field employees, please write instead of phoning.*



USDA

FOR DECEMBER 20, 1948



THE TWENTIETH CENTURY FUND says output per man-hour of the Nation's labor force has increased fivefold since 1860—with shorter work hours and a higher standard of living! How has it been in USDA—Washington and field? Certainly it behooves Government workers and management to strive as earnestly as those in industry and agriculture for increased productivity. This can be attained not only by working harder, but by improving organization, methods, procedures, and tools. During the war the Management Improvement and Manpower Utilization Program was started to aid in achieving this objective by saving manpower and materials, simplifying procedures, expediting operations, improving organization, and reducing costs. Our wartime achievements here were remarkable. What about peace?

The same effort to achieve greater efficiency is necessary now as in wartime. The Management Improvement Program has been reorganized and revitalized under the leadership of W. A. Minor, Assistant to the Secretary. Again it seeks to help administrators and employees increase their productivity. Key Management Representatives provide leadership in each agency or office; employees should look to them for guidance. The Office of the Secretary can supply certain aids, but real accomplishment is the responsibility of agency staffs. They must make the Department machinery run smoothly and effectively.

The following aids are available to help us discover where improvement is needed: Procedure studies, job analyses, work simplification, the establishment of work and performance standards, JMT, forms management, and so on. Cash awards for suggestions leading to improvement add incentive to employees use of such devices. Hundreds of work-improvement case histories in USDA have been compiled and filed as tangible evidence that such programs succeed. *But we must now redouble our efforts to raise our output per employee-hour and thus keep pace with agriculture and industry. That means all of us—field and Washington both.*

Viruses in the plumbing

You may have seen press reports that the virus of poliomyelitis survived remarkably well in an artificial plumbing system. The experiments did show that when neurotropic viruses were suspended in chlorinated drinking water and retained in a plumbing system at room temperature they remained infective for several days. See details with diagram in an article by Joseph Zichis, *Science*, November 5, page 503.

Field awards ceremonies

SINCE THE DEAD LINE for selecting individuals to receive 1949 Honor Awards is not far away, it is time to bring you up to date on what has been happening to the individual and unit awards that remained to be presented after the last ceremony. There have been many interesting bureau ceremonies where 1947 and 1948 awards were given, a number of which are commented upon below.

A ceremony was held at the Northern Regional Research Laboratory of the Bureau of Agricultural and Industrial Chemistry in Peoria, Ill., where Mr. W. A. Minor, Assistant to the Secretary, presented a Distinguished Service Award to the Penicillin Group for making the mass production of penicillin possible. The Alaska Spruce Log Program was presented with a Superior Service Award at Juneau, by Howard Hopkins, Assistant Chief of the Forest Service, for the Secretary. Dr. Kenneth A. Bartlett, Director of the Federal Experiment Station at Mayaguez, P. R., presented Length-of-Service certificates to employees of the Station. Mr. Carmelo Alemar was recognized at the same ceremony for having received a Superior Service Award at the Department ceremony held November 12 of last year. The Tulia, Tex., Work Unit of the Soil Conservation Service, was honored at a public ceremony when Mr. Edward J. Overby, Assistant to the Secretary, presented its employees with a Superior Service Award.

Other public ceremonies have been held to recognize the Forest Products Laboratory, of FS, at Madison, Wis.; Soil Conservation Service employees at Spartanburg, S. C.; and employees located at Beltsville, Md.

Veterans employed

Forty-five percent of the employees in the Executive Branch of the U. S. Government (continental) are veterans. The figure was 44 percent in 1947, 37 in 1946, and 16 in 1945.

Taming the lightning?

THE POSSIBILITY OF preventing lightning-caused forest fires by stopping the lightning at its source in the clouds was explored this summer at the Priest River branch of the Northern Rocky Mountain Forest and Range Experiment Station. At the invitation of the Forest Service, Dr. Vincent J. Schaefer, research chemist of the General Electric Co. and originator of "cloud seeding" to make rain, conducted studies there in northern Idaho during July and August.

In his report to FS, Dr. Schaefer states his conviction that individual cumulus clouds, particularly those formed by orographic (mountain) uplift, and the type that cause many lightning storms in the region, can be stopped cold in their development if properly seeded with frozen carbon dioxide. Instead of growing into thunderstorms, the cumulus clouds either would be precipitated as snow or rain or changed to cirrus or snow clouds, which do not generate lightning.

Some 1,100 forest fires are caused by lightning each year in the northern Rocky Mountain area—about 75 percent of all forest fires occurring in the region. During the 1940 fire season a record of 3,113 lightning-caused forest fires occurred. Further study on lightning-stopping will be necessary before any definite conclusions can be made. Studies will be continued at Priest River under the direction of H. T. Gisborne, who is in charge of fire research for the northern Rocky Mountain station.

"AG STAT." FOR 1947

The 1947 edition of "Agricultural Statistics" (685 pages) came from the press in July 1948, several months later than usual for this book. If YOU have not received a copy and need one, ask for the 1947 book at once from the Office of Information or from the information branch of your own agency. Manuscript for the 1948 edition is about to be sent to the printer.

Agricultural education

SPEAKING ON "Agricultural Education for Democracy," before the Association of Land-Grant Colleges and Universities, November 9, Secretary Brannan said in part—

• • • Education that is really education for democracy can and must raise the general level of knowledge and, in my opinion, must also show us how knowledge can be applied in socially useful ways. • • • For many years, American agriculture has been going through an evolution that has changed it greatly within and also in relation to the other segments of the economy. More recently it has undergone a revolution. This revolution is still in progress, and the long-time consequences are not yet clear. Educators and many others of us in the field of agriculture, like the scientists who developed the atomic bomb, feel a responsibility to promote true understanding of the new developments and to make sure that they result in good rather than ill for mankind. You are all familiar with the facts of our agricultural revolution, and I shall not take your time to review it in detail. Suffice it to say, the recent agricultural revolution puts within our reach a new era of better living. At the same time, it stirs up the fires within the rumbling volcano of surplus—a volcano that always threatens to erupt and engulf us in its smothering, spreading flow. • • • Within agriculture itself, education has a much more complex job ahead. Modern farming becomes more complicated—not simpler. As we mechanize our farms, we require not only a higher degree of mechanical skill but also better management. With modern machinery, a family can farm more intensively and often more extensively. The individual farmer requires more land and higher investment. He produces more and markets more. Thus, the commercial side of his life goes to a new scale of size and importance.

• • • We need experts who can see the whole of agriculture—the meaning to human beings of their work in controlling insects and disease, creating new machines, breeding higher yielding crop varieties, applying their special knowledge in other ways. On the other hand, those who do the general work—the administrative people—must have as the basis for their general decisions a good understanding of what the researchers and experts are doing. In the legislative halls, we need the most understanding generalists of all. It takes a high order of statesmanship to deal intelligently, promptly, and in the public interest with problems as complicated as those in the potato situation I have outlined. And there are many problems just as complicated.

This is an address it would be informative for you to read entire. For instance, you should read the part on the potato situation. To get copies write Press Service, USDA, and ask for No. 2357.

Why just typing?

In USDA for October 25 we suggested that everyone learn how to type so that administrators and supervisors could rough out their letters and reports on the typewriter for typist pools to transcribe. But why stop there? Why not learn your secretary's brand of shorthand too? Then those who now waste so much time in dictating poorly could even more quickly rough out their letters and reports in shorthand for their stenographers to transcribe. What's the matter with this, or are we just getting too plagued smart? And what about using stenotype machines?

So the quail increased

THE ADVANTAGES OF proper land use over mere artificial stock in the propagation of quail are shown in the results at the West Ashland and New Salem quail areas of the Missouri Conservation Commission, Boone County, Mo. Following a 3-year test in these areas beginning in 1942 it was found that stocking without land use changes did not result in a rise in the quail population even in proportion to the normal reproductive rate of the released birds. Restocking with hatchery-reared birds resulted in complete failure in this area.

Then in 1945, the West Ashland area was converted into a testing ground to study the effect of good farming practices on quail populations. The MCC, together with the Western-Winchester Division of the Olin Industries, the Missouri Cooperative Wildlife Research Unit, Soil Conservation Service, the then AAA, Daniel Boone Wildlife League, Extension Service, and the property owners or farm operators began an experiment that included no specific improvements for quail other than those afforded by approved modern land use. The New Salem area was used as a check area.

Not only are quail results satisfactory, but better land use has improved the soil and hence the farm production. In the spring of 1947, for the first time since the area was established in 1942, the quail count was higher than on the New Salem check area. Twice as many birds were found on the area in 1947 as in the spring of 1946!

Spud facts

IN 1919 WE HARVESTED 3½ million acres of potatoes, acre-yields averaged 90 bushels, and we ate about 153 pounds each. In 1947 we got average acre-yields of 182 bushels from about 2 million acres planted and we ate but 122 pounds each. By 1947 we had learned to produce disease-resistant, earlier maturing spuds which ran more to the hill; we were using better fertilizers, fungicides, and insecticides; potato raising had become highly mechanized, storage facilities more efficient, and the use of preheated railroad cars guaranteed cross-continental shipment without freezing damage even in midwinter.

Finally, production was more concentrated in the commercial potato area. Of course potatoes are grown in every State of the Union. But in southern California, for instance, the 1947 aver-

age yield was 420 bushels per acre, and this region was producing 16 times as many bushels as in 1919! The same thing was true on a smaller scale in other commercial areas. Meanwhile consumers had at their disposal a wider variety of fresh and processed vegetables than ever before and they depended less on potatoes.

During the 1930's potatoes caused increasing concern. The Government sought to cut spud surpluses by emergency action, maintaining balance through marketing agreements, diversion programs, and aid to schools and charitable institutions. The Government sought also to protect and rebuild our soil, improving its fertility. To assure adequate supplies during the war, potatoes as a Steagall commodity were given price support at 90 percent of parity, a level to be reduced to 60 percent in 1949.

The USDA has gone to great lengths to prevent potato wastage—but in the old days, remember, growers often let huge quantities of the tubers rot in the field and merchants often took heavy losses. Then people blamed their own judgment or a faulty economic system, not the Government. This year some use for every surplus potato has been found.

Brief but important

Locker plant information

USDA Miscellaneous Publication No. 588, Instructions on Processing for Community Frozen-Food Locker Plants, was first issued March 1946. A revision dated August 1948 has appeared.

Research Achievement Sheets

Over 112 Research Achievement Sheets, originated by Dallas S. Burch to give comprehensive 2-page reports on our agricultural research projects, have now been issued. Copies are available from the Coordinator of Research Publication, USDA, Washington 25, D. C. Release No. 2424, for which write Press Service, USDA, lists all sheets issued to date.

Memorial committee

The Secretary has established a World War II Memorial Committee with Under Secretary Loveland as Chairman to consider and recommend ways and means of honoring USDA employees who lost their lives in World War II and to give over-all direction and guidance to plans and programs developed.

Spiritual autobiographies

M. L. Wilson, Director of Extension Service, appears with 14 other distinguished Americans, foreign- and native-born, white and Negro, in a new Harper & Bros. book, "American Spiritual Autobiographies—Fifteen Self-Portraits," with photos. Wilson begins his assignment by saying, "It is with a sense of humility that I take on this role." Yet what he writes is moving and inspiring.

A good egg

We recommend Consumer Guides for Buying and Keeping Eggs, a 4-page processed statement (AIS-77) issued in October and to be procured from Information Branch, Production and Marketing Administration, USDA.

Scarborough honored

A recent issue of the Greenville, S. C., News says that Julian H. Scarborough of Columbia, President of the Federal Land Bank, will have conferred upon him the degree of doctor of laws at the annual commencement ceremonies of Furman University next spring.

The farmer and the atom

We have some copies of an address delivered recently by Chairman Lillenthal of the Atomic Energy Commission before the Ohio Farm Bureau, entitled "Farm People and the Atom." To procure a copy write the editor of USDA or phone Miss Arden, Ext. 4649.

Conservation farm plan

In new Leaflet No. 249, prepared by Soil Conservation Service, you will find an answer to the question, "What is a Conservation Farm Plan?" This blueprint for farming operations was prepared by farmers and soil conservation technicians working together. Procure the leaflet from SCS.

USDA work reviewed

The lead article, in Nutrition Reviews for October 1948, "Nutrition Programs for Industrial Workers," reviews the work of the Industrial Feeding Program Division, War Food Administration. The same issue contains another article of interest to USDA workers, "Rutin Treatment of Capillary Fragility," especially as concerns diabetic patients.

Potato goals

Production goals for the 1949 potato crop represent a substantial cut in acreage, the national figure having been set at 1,938,000 acres—200,000 fewer than were planted this year. The support price will be at a rate of 60 percent of parity. For details write Press Service for No. 2418.

Talking it over

Extension Service has a nifty new blue-covered publication called "Let's Talk It Over—The Extension Worker as a Counselor." It is by Lydia Ann Lynde, extension specialist in parent education. It contains a good deal of sound material for any nonextension workers who give guidance, information, and advice to farm people. It is well-prepared, wisely written, and psychologically sound.

Farm labor

There were more people at work on our farms November 1 this year than on that date for any year since 1940, but the number of family workers on farms was slightly less than a year ago. There were 9 percent more hired farm workers than a year ago in the entire country.

LGCA

President John A. Hannah of Michigan State College was elected President of the Association of Land-Grant Colleges and Universities at the recent meeting in Washington, D. C. President J. L. Morrill of the University of Minnesota became Chairman of the Executive Committee, and Dean and Vice President C. B. Hutchinson of University of California became Division Director for Agriculture.

2,4-D for barberry bushes

The Bureau of Entomology and Plant Quarantine has discovered that 2,4-D can be used to eradicate objectionable barberry bushes to protect northern small grains from rust which develops on the barberries and then spreads to wheat, oats, rye, or barley. A much stronger solution is used than for weed-killing. The method is both more economical and effective than grubbing.

Wheat starch and gluten

Research Achievement Sheet No. 113 (C), available from Agricultural Research Administration, tells about the improved method for obtaining starch and gluten from wheat flour by a batter process developed in the Northern Regional Research Laboratory, Bureau of Agricultural and Industrial Chemistry. A full history of the project and data on its estimated monetary value are included.

Spuds in kilts

Scotland also is hunting scientifically for the perfect potato, experimenting with hundreds of varieties—seeking to bundle disease immunity, virus resistance, high yields, and prime keeping quality together in one spud. Scotland does a seed potato trade of 20 million dollars annually, and most of the potatoes grown in Britain and in many other parts of the world were Scottish in origin.

It's a libel

Every now and then you hear that the black walnut tree has injured potatoes, tomatoes, alfalfa, apples, peaches or other crops planted nearby. That's a libel. Our plant scientists found no poisonous effect when two tomato varieties were planted under large bearing walnut trees. The walnut has been accused of exuding a toxic organic compound named juglone after the tree's scientific name, *Juglans nigra*.

In Extension Service

The retirement is announced, after 43 years of Government service, of Harry Porter who expects to reside with his sister in Waukesha, Wis. * * * The death is announced of Miss Bertha M. Bennett, who entered the Department in 1910, spent her first decade in the Bureau of Chemistry, then transferred to Extension Service as administrative assistant in subject-matter work. She was an ideal woman and a most efficient clerk.

Puerto Rico extension

During the past 2 years 20 county agricultural agents and the same number of home demonstration agents have been added to Puerto Rico's extension staff, while 14,000 boys and girls are enrolled in 4-H Club work which began in 1935. Work with cooperatives, consumer co-ops in particular, is unique and successful. Sixteen special agents in cooperatives and consumer education are working in municipalities along with the county and home demonstration agents; funds are mainly provided by the Insular Government.

"Cotton sharp-shooter" guilty

Agricultural Research Administration scientists have determined that a leafhopper known in the South as the "cotton sharp-shooter," is the most important carrier of phony peach disease virus. It sucks the juices of peach trees at certain times of the year. Phony peach disease occurs in the Carolinas and Georgia to Texas; there is no known cure. It has resulted in the destruction of 1½ million peach trees since 1929, but if insecticides could be developed to kill the disease carriers, that might save some commercial plantings. You will find more detail in release No. 2307; write Press Service, USDA.

Farming and democracy

This is the title of a thorough, penetrating, documented, yet readable book dealing with the relationships between farming and democracy particularly as pertain to the family-sized farm. The book examines the Jeffersonian ideal, the British and the French farm experience, and the evolution and formulation of American farm policy. It is by A. Whitney Griswold and was published by Harcourt, Brace & Co., New York City. Our Library has copies.

Graduate School

The USDA Graduate School announces its classes for the spring semester to begin February 7 and continue until May 20; the registration period is January 29 through February 5, with a late-registration fee of \$2! Courses are offered in wide variety in public administration, office techniques, foreign languages, social, biological, and physical sciences, language and literature, mathematics, statistics, and technology. Also be sure you ask about the various series of lectures sponsored by the Graduate School when inquiring about courses.

Davis honored

Raymond H. Davis, Soil Conservation Service, has been honored with the Army's Meritorious Civilian Service Award, in recognition of his services to the Occupation of Japan. The citation states that "as Chief, Agricultural Division, Natural Resources Section, General Headquarters, Supreme Commander for the Allied Powers * * * Mr. Davis displayed marked professional skill and unusual ability in directing the democratization of agricultural activities and the maximization of food production" in the occupied country. Ray was furloughed by SCS from his job as Chief, Project Plans Division, in November 1946, for the foreign assignment. He returned to the United States last summer and is now at his old post in Washington.

The Bean Poll

In USDA for August 16 we wrote enthusiastically about How to Predict Elections, a book just then out by Louis H. Bean of the USDA. The author with becoming and characteristic modesty insisted that we say this book did not predict the results in the election then coming up. But the method outlined in the book, facetiously called "The Bean Poll" by its author, could be used to predict that result and, so used, it was accurate. Thereupon Dr. Bean broke out in newspaper publicity all over. So when you are decrying the inaccuracy of the experts always remember that Dr. Bean was right and the method outlined in his book accurately predicted just about what happened November 2.

Nobel prize on DDT

Dr. Paul Mueller of Basle, Switzerland, received the 1948 Nobel Prize in medicine for having discovered the insect-killing powers of dichloro-diphenyl-trichlormethane. The substance was first produced by a German organic chemist in 1874. In 1939 Dr. Mueller and his staff at Geigy Drug Industries in Basle discovered that the substance was a powerful insect-killer. It was used extensively that year in Switzerland to combat the migratory Colorado potato beetle. Dr. Mueller is now 48 years of age and has been with Geigy since he was 25. He is a native Swiss educated at University of Basle. It was his discovery that led to the widespread testing of DDT by American scientists and its world-wide wartime and peacetime uses.

"Until a program for personnel induction at the infant level can be coordinated with the Federal prose tutorship objectives, this situation (i. e., a vestigial knowledge of English among some neophytes in the Government Service) will continue to create embarrassments at the administrative and higher levels. Only drastic and immediate action will achieve the impact on the linguistic functions involved necessary and liquidate a stylistic status recognized as inoperable." Quoted from *Federal Prose: How to Write and or for Washington*, by James R. Mastersen and Wendell Brooks, University of North Carolina Press.

Grain hunters

We are sorry Nation's Business for September didn't reach our desk from the Library until November 18, but even thus belatedly let us suggest that you read "Grain Hunters of the West," a truly excellent article therein by John W. Ball. He has traced out the story of Mark Alfred Carleton better than we have ever seen it written before. He also tells entertainingly and accurately the stories of Joseph Danne, Edgar S. McFadden, and others. A fine job by a fine reporter. See also Thomas R. Henry's "Disease Beats a Slow Retreat," in the same issue of Nation's Business for good material regarding penicillin, et al.

Being a better boss

A New York firm of management consultants that specializes in doctoring ailing businesses holds that a good boss is consistent, adaptable, emotionally adult, sure of his abilities, a good planner, makes decisions easily, leads his people, has good judgment, knows what he wants, and comes fully equipped with a sense of humor. The firm also believes that people want to enjoy work, like a voice in the plans, desire appreciation, must know the job aims, and demand effective and respected leadership. For more detail see: "You, Too, Can Be a Better Boss," by Phil Gustafson, in September 1948 Nation's Business.

Soy oil now more refined

In the past soybean oil has tended to keep poorly and to develop a painty, fishy, or grassy flavor. This tendency was traced to minute quantities of metal the oil took up from the refining equipment. Our Northern Regional Research Laboratory, at Peoria, Ill., has now shown that 3 to 4 ounces of citric acid can be used to process a ton of soybean oil to give it greatly improved keeping quality, making tastier salad dressing and other food products possible. Dr. H. J. Dutton was in charge of this project which will benefit farmers, refiners, and manufacturers alike. For more detail write Press Service, USDA, and ask for No. 2402.

Chickens for meat

We have long had two kinds of cattle, dairy and beef. Now poultry leaders are developing chickens for meat—more efficient birds for the grower, though with reasonably good egg production and hatchability to satisfy the hatcheryman, full-feathered in 12 weeks to please the processors, and developing the plump, attractive, yellow-skinned carcasses demanded by consumers. The breeders hope to attain a 4-pound bird in 12 weeks using only 4 pounds of feed per pound of chicken produced. The long-range goal is to develop birds with 25 to 30 percent more meat on them than the present commercial birds, and which will lay 150 to 175 eggs a year, which is better than the present U.S. average. This should be accomplished within a decade. Extension poultryman Harlan L. Shrader can give you more details on this.

Ag history

The Department's Committee on Agricultural History met November 2 and outlined its programs of work. It was agreed that the committee would serve as a policy group, delegating most of its activities to subcommittees. O. C. Stine, chairman of the committee, appointed the following subcommittees: (1) Subcommittee on the Selection of Retired or Retiring Employees To Be Invited to Record Their Experiences, composed of O. C. Stine, chairman, M. L. Wilson, E. B. Reid, W. A. Jump and N. Robert Bear; (2) Subcommittee on Standards for Historical Accounts, composed of Benjamin Schwartz, chairman, E. E. Edwards, and T. Swann Harding; (3) Subcommittee To Formulate a Plan for Handling Unpublished Documents, composed of Ralph Shaw, chairman, John Thurston and Gladys Baker.

Penicillin pays off

Today a dozen pharmaceutical houses are producing penicillin commercially and the price per 100,000 units has dropped from \$20 to less than \$1. The current rate of production is 125,000 times larger than that during the first 6 months of 1943, and our annual production is estimated at a value of 150 million dollars at prescription counters and in hospital dispensaries. Our research on penicillin, mainly at the USDA's Northern Regional Research Laboratory, cost \$100,000 for salaries and expenses; the Northern Lab represents a public investment of 2 million dollars. This investment has paid handsome dividends for farmers, physicians, pharmacists, hospitals, drug manufacturers, and the ill and injured. Says Secretary Brannan: "Insofar as I can see, the evaluation of the research in penicillin can be presented in human terms or in economic terms, but the verdict is undeniable. It has brought rich rewards for all—now and for the future."

More abundant life

Laboratory rats thrive when given very liberal quantities of milk in the diet, and the well-fed descendants of such well-fed ancestors live 10 percent longer than usual. Adulthood is achieved earlier, signs of senility are deferred, so the prime of life is thus increased 10 percent. Apply this finding to the human race and see what great possibilities it holds. There is much difference between being just passably well-nourished and receiving optimal nutrition. Two to four times the minimum needs of calcium, vitamin A, and riboflavin in diets otherwise adequate can effect marked improvement. In recommending increased consumption of milk, leafy green and yellow vegetables, and foods rich in vitamin C, our USDA nutritionists aim at more abundant health for all.

F. G. Cottrell

Dr. Fred G. Cottrell, one-time head of our Fixed Nitrogen Laboratory, died in Berkeley, Calif., November 16 aged 71. His contribution to science in money and knowledge was enormous. While a chemistry instructor at University of California, 1906-9, he perfected the Cottrell Electric Precipitator which caused smoke to clear and saved 20 million dollars worth of chemical products annually that were previously wasted. This threatened to make Cottrell rich, a catastrophe he took immediate steps to prevent by forming a corporation to exploit his patents—many others followed—and turned the profits over to finance scientific research by individuals and institutions. Last year the corporation gave away \$729,000 for such purposes. Dr. Cottrell was head of the Bureau of Mines 1920-22, then became Director of the Fixed Nitrogen Research Laboratory and solved the problem of Muscle Shoals. A native of Oakland, he returned to California for retirement. He graduated from University of California in 1896 and from the University of Berlin in 1901.

Sprays and insecticides

There are available from the Bureau of Entomology and Plant Quarantine new processed publications: "A Review of the Literature on Sprays to Destroy Overwintering Coddling Moth Larvae," by M. A. Yothers; and "Equipment for Dispensing Insecticides from Aircraft," by Frank S. Faulkner and C. C. Deonier.

Liquid ammonia fertilizer

Use of liquid ammonia as a source of nitrogen for fertilizing crops is increasing. In a recent leaflet, Dr. M. S. Anderson of the Plant Industry Station, Beltsville, Md., reported an estimated use of about 35,000 tons of nitrogen in this form in the United States last year. In addition to discussing briefly the use of this form of nitrogen fertilizer, the leaflet makes comparison with other sources such as ammonium sulfate. Mention is made of experimental work conducted in several States. Those interested in possible use of liquid ammonia as a source should procure "Liquid Ammonia as a Fertilizer," from the Plant Industry Station, Beltsville, Md., and should write their own State's agricultural experiment station for recommendations regarding the use of ammonia within the State.

Wright recollections

On the day that the Wright Brothers' "Kitty Hawk" plane was returned to Washington with a ceremony before the Freer Art Gallery, across from our Administration Building, two members of the USDA recalled their early memories of Dayton's rousing reception to the brothers on their return home after the first successful flight. M. P. Jones, extension entomologist, recalled his family's trip by wagon and interurban to Dayton, and the big fireworks display on the Miami River. David G. Hall, Bureau of Entomology and Plant Quarantine, remembered living in Dayton near the Wrights and playing around their shop where he acquired a "knack for tinkering." Back in the thirties Orville Wright recognized Hall in a pullman diner and told him at length of his differences with the Smithsonian Institution.

Killed in auto

The Bureau of Agricultural Economics lost one of its outstanding State Statisticians about midnight November 18, when Andrew J. Surratt, head of the State-Federal crop reporting office at Springfield, Ill., died in an automobile accident near St. James, Mo. Mrs. Surratt, who was in the car driven by her husband when it overturned, suffered slight injuries. Mr. Surratt, just past 67, was the dean of active State statisticians and had been with the Department since 1913. He first served as agricultural statistician in the Dakotas with headquarters at Aberdeen, S. Dak., transferring to Illinois in 1922. He was chairman of the Illinois Corn-Hog Board of Review, AAA, USDA (1933-35) and a member of the Federal-State Drought Relief Commission for Illinois in 1934 and 1936.

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Correspondence should be addressed to T. Swann Harding, Editor of USDA, Office of Information, Department of Agriculture, Washington 25, D. C. Washington or field employees, please write instead of phoning.

